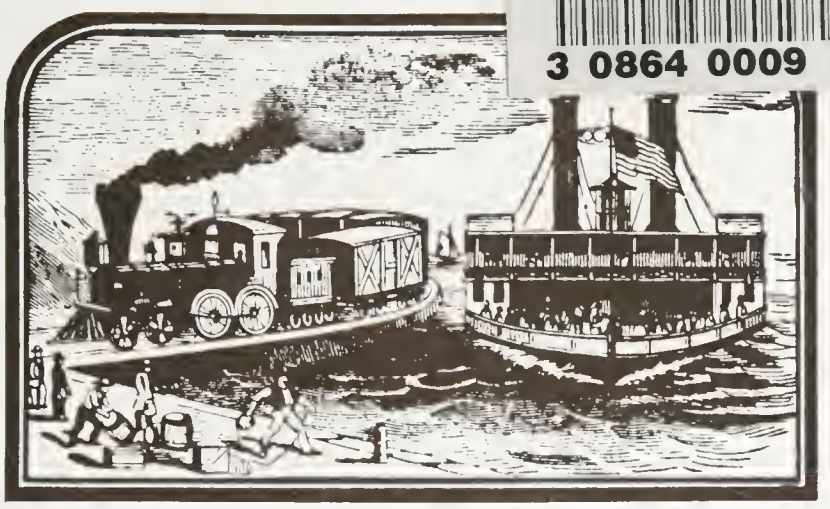

HRA Study

HISTORIC RESOURCES STUDY

MOUNT HAGGIN AREA

DEER LODGE COUNTY, MONTANA

Prepared for

Montana Department of Fish, Wildlife, and Parks
Bozeman, Montana

by

Historical Research Associates
Missoula, Montana

June 30, 1980

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ACKNOWLEDGEMENT

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INTRODUCTION

A. Purpose and Objectives

The Montana Department of Fish, Wildlife and Parks purchased the 55,000-acre Mount Haggin Area from the Mount Haggin Livestock Company (through Nature Conservancy) in 1976. A combination of state funds, federal Bureau of of Outdoor Recreation monies (Heritage Conservation and Recreation Service) and a private donation was involved in the acquisition. Since acquiring Mount Haggin, the Department has managed the area for protection of wildlife and wildlife habitat. To date, outdoor recreation, principally hunting and snowmobiling, has been the major activity in the Mount Haggin Area.

The Department of Fish, Wildlife and Parks recognizes that there are other values associated with Mount Haggin. In 1977 and 1978, the Department sponsored archaeological surveys of the area. The first survey was directed by Dr. Leslie Davis of Montana State University. The second was conducted by Dr. Davis' student, Marc Smith. Both surveys were designed to provide a sample of the archaeological resources in the area. The later survey was confined principally to the Deep Creek-French Creek drainages (Secs. 1, 2, 3, 9, 10, T2N T12W; Secs. 25, 35, 36, T3N R12W; and Sec. 30, T3N R11W). During these surveys, four historic sites were identified.

In January, 1980, the Department contracted with Historical Research Associates of Missoula to prepare a historic resources overview of the Mount Haggin Area. The study was designed to 1) present a summary of the history of the area, 2) identify areas of likely historic resources, 3) determine the extent of threats to historic resources, 4) develop a survey plan to inventory historic sites. In addition, HRA's agreement with the Department stipulates that the Mule Ranch will be recorded and assessed for its historic qualities.

Although the HRA staff investigator considered the Department's state

MT. HAGGIN AREA BASE MAP

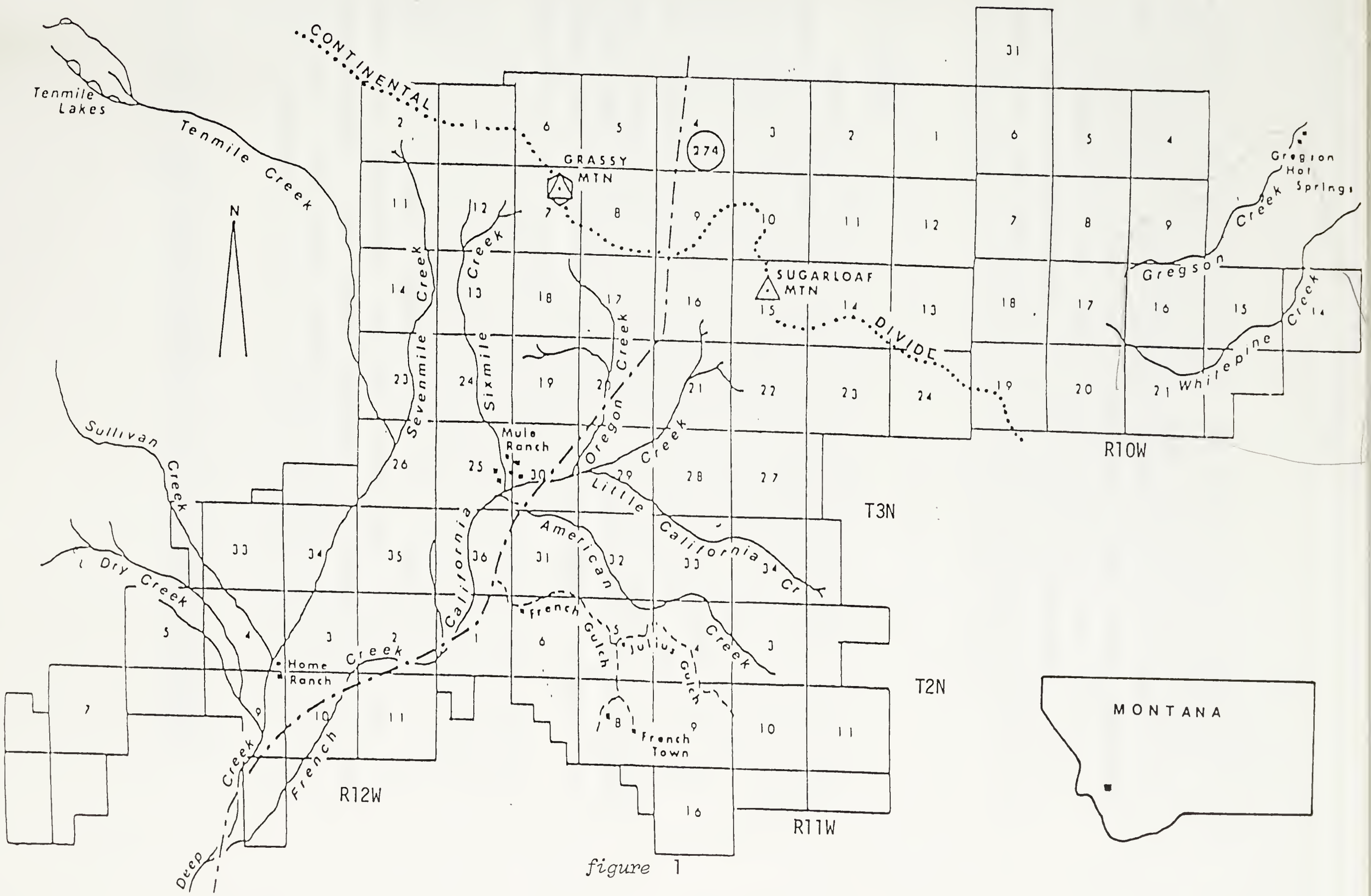

figure 1

and federal statutory obligations with regard to protecting historic and other cultural resources,* the present study was not designed to satisfy those requirements. Criteria for determining a historic site's eligibility for listing on the National Register of Historic Places was employed throughout the preparation of this report. However, field work and a full site recording were undertaken only at the Mule Ranch. The Home Ranch was inventoried in a preliminary manner. With respect to those two resources, HRA has made a recommendation of eligibility to the National Register.

B. Methods

Preparation of the historic resources overview consisted of a thorough literature and records search of the Mount Haggin Area. Historic site records of the Montana State Historic Preservation Office and the U.S. Forest Service were consulted for information on possible resources. Federal and state publications were examined, as well as Bureau of Land Management tract records and cadastral survey plats. In addition, U.S. Forest Service records from the National Archives in Washington, D.C., were reviewed for information on past lumbering activities in the area. Secondary literature and newspaper accounts also were examined. Interviews with knowledgeable informants were conducted after the literature and records search.

Field survey in the Mount Haggin Area was limited to a full recording of the Mule Ranch and an inventory of the Home Ranch. The field survey was conducted by Alan Newell (Historian) and James McDonald (Historical Architect). Site forms were completed for the sites. Each structure was fully described and photographed, and a site map was prepared for the area. Following completion of the recording procedure, the Mule and Home Ranches were evaluated for their historic significance using the criteria for listing sites on the National Register of Historic Places (36 CFR Part 60.6). That

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*National Historic Preservation Act of 1966, National Environmental Policy Act of 1969, Montana Antiquities Act, and Montana Environmental Policy Act of 1973.

criteria is as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> (a) That are associated with events that have made a significant contribution to the broad patterns of history; or
>
> (b) That are associated with the lives of persons significant in our past; or
>
> (c) That embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) That have yielded, or may be likely to yield, information important in prehistory or history.

Analysis of data and preparation of the historic resources overview and survey plan followed completion of the field inventory.

PART II

HISTORICAL OVERVIEW

A. The Environment and Historical Development

The Mount Haggin Area is situated approximately ten miles southeast of the city of Anaconda in Deer Lodge County, Montana. The Area contains high grassy hay meadows, shortgrass prairie and sagebrush terraces, and mountains covered by coniferous forests of primarily lodgepole pine and fir. Valley elevations mostly exceed 6,000 feet, with the highest mountain peak (Glassy Mountain) rising to 8,000 feet. Mount Haggin, to the northwest of the Area, is 10,610 feet in elevation. The Continental Divide bisects the north half of the Mount Haggin Area. The principal drainages of French, Deep, California, Oregon, Sullivan, and Tenmile Creeks dissect the basin and flow southwestward toward the Big Hole River. The French Creek-Deep Creek area is considered to be in the Upper Missouri River Basin System, while Mill Creek and Willow Creek, lying on the Area's northern boundary, are part of the Upper Columbia River Basin System.

Environmental factors have greatly influenced the historical development of the Mount Haggin Area. Ethnohistorical evidence suggests that Native American groups may have traveled through the French Creek Valley on their way to bison hunting grounds east of the Rocky Mountains. The area's lush natural hay meadows and abundant game also may have attracted Indian hunters during the summer months.

Gold, located in glacial gravel deposits, attracted the first white intruders to the Mount Haggin Area during the 1860s. Placer mines were established along French and Oregon Creeks as early as 1864. A few decades later, the rich pasture lands of the Area supported a variety of livestock during the summer. Beginning in the 1880s, hay was cut from the French Creek Valley and delivered to ranches in the Deer Lodge Valley to be used in winter feeding operations. By the 1920s, sheep joined other livestock on the ranges of Mount Haggin and the region soon became noted

for its pure-bred Hampshire populations.

The timber resource of the Mount Haggin Area beckoned lumber entrepreneurs at an early date. The first trees were commercially cut in the Area around 1883. At the turn of the century, the U.S. Forest Service initiated its first large timber sale in the Northern Region at French Gulch. Lodgepole pine from the French Gulch area was used both as cordwood for smelting operations at Anaconda and for the production of mine supports (stulls).

While the natural resources of the Mount Haggin Area attracted investors and settlers alike, the economic development of the region has been hampered by the harsh climate. Deep snows accompanied by severe temperatures characterize the winters at Mount Haggin. Summers are typically short, with warm days and cool nights the general rule. Because of the difficulties of wintering in the Mount Haggin Area, settlers have often left the region during the winter months. A relatively short growing season has restricted the Area to use as summer pasturage.

B. Early Use of the Mount Haggin Area

During protohistoric times (approximately 1700-1800) the Mount Haggin Area was seasonally visited by the Flathead Indians. The Area was a transitional zone, reflecting through the Flatheads the influences of plains and plateau cultures. From their winter homes in the Bitterroot Valley of western Montana, the Flathead probably traveled through and hunted in the French Creek Valley. However, there is little evidence to suggest that the valley was heavily used by these peoples. The Flathead's main travel routes to the eastern plains bison grounds were north of the Mount Haggin Area. Seasonal journeys in search of bitterroot took the Flathead into the Big Hole Valley to the south of the French Creek area.[1]

Other intermontane tribes also may have sojourned in the Mount Haggin Area in the years prior to the coming of the white man. The Nez Perce and Bannock tribes often traveled east of the Rocky Mountains in search of

bison and may have visited the French Creek Valley. As with the Flathead, the accustomed route of travel for the Nez Perce and Bannock was not through the Mount Haggin Area.[2] Generally, the tribes existed in harmony, although one old Flathead tale recalls when the Flathead defeated the Bannock in a battle for control of the Big Hole Valley.[3]

Early white incursions into the intermontane region also skirted the Mount Haggin Area. The first fur hunters and traders to enter the northern Rocky Mountains during the last decade of the eighteenth and first decade of the nineteenth century did not move far enough south to enter the French Creek Valley. David Thompson, an explorer for the Canadian Northwest Company, visited the Missoula Valley during the winter of 1811-12, but did not proceed further into southwestern Montana. The Northwest Company's rival, the British-owned Hudson's Bay Company, confined most of its activities to the Columbia River Basin during these early years. Upon merger with the Northwest Company in 1821, the Hudson's Bay Company consolidated its hold on the northwest plateau and intermountain region. While fur trading brigades may have ventured into the Mount Haggin Area, the company's permanent operations were located in northwest Montana, Idaho and Washington.

American fur entrepreneurs may have trapped in the Mount Haggin Area during the first decades of the nineteenth century, but there is no firm evidence to support such a conjecture. Captains Meriwether Lewis and William Clark opened the region to exploration during their expedition through the Beaverhead Valley in August, 1805. Mistaking the Big Hole River for the main source of the Missouri, Captain Clark ascended the stream for a short distance on August 6. Clark later recounted his experience:

> We arrived at the forks (of Jefferson and Wisdom rivers) about four o'clock; but unluckily Captain Lewis' note had been left on a green pole which the beaver had cut down and carried off with the note--an accident which deprived us of all information as to the character of the two branches of the river. Observing, therefore, that the northwest fork (Wisdom river) was most in our direction, and contained as much water as the other, we ascended it. We found it extremely rapid, and its waters were scattered in such a manner that for a quarter of a mile we were forced to cut a passage through the willow-brush that leaned over the little channels and united at the top.[4]

Clark ascended the Big Hole only a short distance before he was informed of his mistake. He reversed directions and descended the river. Despite this brief foray on the Big Hole, neither Lewis nor Clark gave any description of the Mount Haggin Area.

A number of Americans attempted to establish claims to the potential fur trading wealth of southwestern Montana during the early nineteenth century. In the spring of 1810, Andrew Henry and an exploring party in the employ of Manuel Lisa's St. Louis Missouri Fur Company launched an expedition from the Yellowstone River to the Three Forks of the Missouri. Despite a lucrative season of trapping and trading at a newly constructed post at Three Forks, the party met with continual harassment from Blackfeet Indians. Consequently, Henry abandoned the Three Forks post and led his party over the mountains to the Snake River, where he built a new trading post.[5] Between 1821 and 1823, attempts to revive the Upper Missouri fur trade by Lisa's successor in the Missouri Company, Joshua Pilcher, also encountered difficulty with the hostile Blackfeet. The murder of two of Pilcher's most valued employees in 1823 forced him to abandon once again the Missouri headwaters country.[6]

The antipathy of the Blackfeet tribes prevented a more extensive use of the southwest Montana region by fur traders. Furthermore, the presence of the Yellowstone and Upper Missouri Rivers, both navigable for fur-carrying bateaus, directed most American attention to the north and east of the Mount Haggin Area. Only with the discovery of gold in the early 1860s did American adventurers begin to enter the region in large numbers.

C. The French Gulch Mining District

The recorded history of the Mount Haggin Area begins with the gold mining era in Montana. That era arrived when James and Granville Stuart reported the location of placer gold at Gold Creek near present-day Garrison, Montana, in 1858. However, not until the rich strike at Bannack in the summer of 1862 did the potential for gold discoveries attract miners to Montana from California and the Salmon River mines in Idaho.

The community of Bannack on Grasshopper Creek grew rapidly during that summer. By October, the town boasted of having more than 400 residents. Early in the spring of 1863, Bannack had a population of over 1,000. Also that spring of 1863, new claims were located in Alder Gulch in the Ruby Valley. The mining camp of Virginia City soon attracted many of the miners from Bannack. Little more than a year later, prospectors discovered placer gold at Last Chance Gulch near the Missouri River and, soon after, the town of Helena was born.[7]

Contemporary with the discovery of gold at Bannack, Alder Gulch and Last Chance Gulch was the location of placer claims at French Gulch in the Mount Haggin Area. Two Frenchmen are credited with making the discoveries in 1864.[8] French Gulch, as did many of the placer mining districts in Montana Territory, soon attracted a variety of itinerant prospectors. American, Spanish, German, and Chinese miners entered the Mount Haggin Area during these early years.[9] The names given to creeks in the Area reflect this diverse ethnic influence--German Gulch, French Creek, American Creek.

The French Gulch Mining District included some of the more important mining properties in southwestern Montana. The district encompassed French Creek, California Creek, American Creek, Oregon Creek, and their minor tributaries. In the first four years since its discovery, the district yielded between $1,000,000 and $5,000,000 in gold nuggets and dust.[10] The gulch was a roaring gold mining camp, similar to hundred of others throughout the West. The town of French Gulch, located at the junction of French Creek and First Chance Creek (Section 1, T2N R12W), served as the logistical focal point for miners who worked the numerous creeks and draws in the district. A road from the Deer Lodge Valley to French Gulch linked the town to the rest of the Territory.[11] Another "pioneer trail" bisected the Mount Haggin Area and connected the gulch with the Big Hole Valley. (See Figure 2.)

W. R. Allen, a future lieutenant-governor of Montana, was born in the town of French Gulch in 1871. Allen's father had arrived in French Gulch six years earlier and had located one of the earliest placers at "Allen's Bar."[12] In his later published reminiscences, the younger Allen recalled what it was like to live in the isolated community of French Gulch.

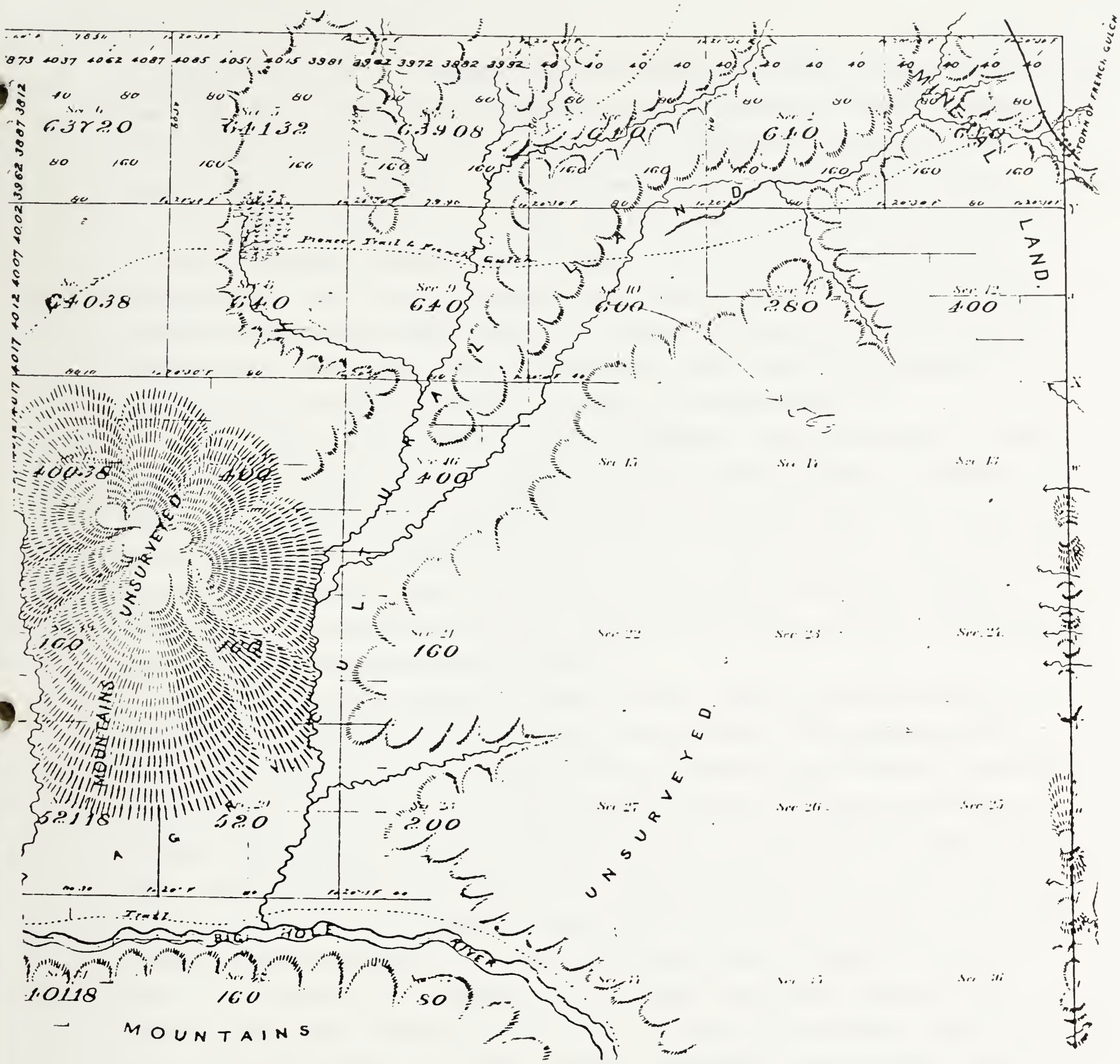

figure 2 General Land Office Survey Plat, 1872

Supplies had to be freighted in from either Salt Lake City over the Corrine Road or from Fort Benton over the Mullan Road.[13] During the months November to May, snow, usually three to six feet deep, prohibited the delivery of large quantities of supplies. No freighters dared approach French Gulch. The only goods to reach the isolated community were those that were carried by men on snowshoes from the lower valleys. Mail that arrived from Warm Springs once a week during the winter was transported in this way.[14] After spending the winters of 1871-1873 at French Gulch, the Allen family moved to a ranch in the Deer Lodge Valley. Thereafter, the elder Allen worked his placer claims on French Gulch only during the summer months.[15]

French Gulch was the scene of some excitement during mid-August of 1877. Chief Joseph's band of Nez Perce Indians had left their home near Lapwai, Idaho, that summer and were engaged on an epic march to Canada. On August 9, the Indians were encamped along Trail Creek in the Big Hole Valley when they were attacked by troops from Fort Shaw under the command of Colonel John Gibbon. In the ensuing battle, Gibbon lost 29 men killed and 40 wounded, while the Nez Perce losses were 83 dead.[16]

One day after the "Battle of the Big Hole," two soldiers arrived in French Gulch on their way to Butte for reinforcements. Not expecting the Indians to withdraw from the field, Gibbon anticipated the need for more men to replace his fallen troops. After changing horses at French Gulch, the troopers headed toward Butte. One day later, a relief column of 200 civilians, including William A. Clark, came through French Gulch on its way to the Big Hole. The men encamped at the town on the night of August 11.[17] The anxiety of the townspeople must have been raised even further by the presence of this armed camp. However, Chief Joseph's warriors had secretly abandoned the scene of battle on the night of August 9, heading southeast toward Yellowstone National Park. Shortly thereafter, some of the army wounded from the fight were treated at French Gulch by doctors who had traveled to the town from Butte.[18] The crisis over, the fortunate miners returned to their prospecting.

Placer mining in the French Gulch Mining District, as in other mining districts, was a temporary phenomenon. The readily available nuggets from

gravel bars and exposed crevices soon dissipated. By 1877, it was no longer profitable to recover gold with only a pan, rocker and sluice box. Many miners left the area at this time. Others, who had sufficient determination and capital, invested in the abandoned placer claims and began hydraulic mining in the gulch.

Hydraulic mining consisted of directing a concentrated stream of water at a potential gold-containing gravel area. The hundreds of cubic yards of material that would be dislodged in the process was channeled through sluice boxes to a screen, which would remove the sediment from the gold. This operation was essentially a more elaborate, and destructive, means of placer mining. It required the diversion of large amounts of water to the site of the hydraulic activity. The origin of many ditches along Oregon, California and American Creeks can be traced to this period of mining history of French Gulch.[19]

The Allen family took advantage of the decline in placer mining at French Gulch by purchasing a number of the original diggings. Soon, the senior Allen had acquired most of the French Gulch camp.[20] Other less ambitious prospectors also entered the district. Many of these new arrivals were Chinese. As in other mining districts throughout the West, Chinese succeeded Anglo miners at the old tailings. Leasing the placer claims from their owners, the Chinese methodically worked the mined-over gravel bars and beds. They often established small log dwellings near a claim or assumed residency in an abandoned cabin or even a mine tunnel. In the French Gulch District, there is a Chinese town and cemetery reported in SE/4 SE/4 Section 1, T2N R12W.

The Chinese probably left the French Gulch area during the mid-1890s, somewhat later than they did many mining districts.[21] A number established themselves in the larger communities of the West, including Butte. In 1890, the Chinese population of that community was 391. After 1910, the number of Chinese in Butte declined, to a total of 155 in 1930.[22]

As placer mining for gold declined in French Gulch and other mining districts in Montana, prospectors turned their attentions to other minerals. Silver, of course, was a valuable commodity that engaged the energies and

capital of numerous individuals. More importantly, copper mining in Montana, notably at Butte, began to attract the interest of ambitious capitalists, like Marcus Daly.

Marcus Daly made his initial investment in the "Butte Hill" in 1880. With the support of San Franciscans George Hearst, James Ben Ali Haggin, and Lloyd Tevis, Daly established the Anaconda Silver Mining Company. Shortly thereafter, Daly struck the fabulous copper lode at Butte and turned his attentions toward the exploitation of that metal. In 1883, he platted the town of Anaconda at Warm Springs Creek, twenty miles west of Butte. Construction of a smelter known as the Upper Works in 1883 marked the beginning of Daly's and the Anaconda Copper Mining Company's rise to prominence in Montana economic history. Anaconda and Butte soon became the industrial seat of Montana.[23]

Since the mid-1880s, Deer Lodge County has been noted for the copper smelting works at Anaconda. Much of the twentieth-century history of the county and the Mount Haggin Area is linked with the economic expansion and periodic contractions of the "Company." Notwithstanding this focus, the French Gulch Mining District continued to contribute to the mineral wealth of the region.

In 1898, William R. Allen, who had been working for the Anaconda Company, left that firm's employ and assumed control of his father's mining properties at French Gulch. In conjunction with his acquisition of timber interests in the area (see Section D), Allen soon consolidated most of the mining placer and lode claims in the district. They encompassed more than 800 acres of land. The Spain and McKinley mines were the cornerstones of what became the Allen Gold Mining Company (see Figure 3) (Sections 4, 5, 6, 7, 8, 9, T2N R11W; Section 1 T2N R12W; Sections 27, 29, 30, 31, T3N T11W).[24]

The McKinley and Spain were subsurface mines. The McKinley mine had a shaft of 100 feet, while the larger Spain mine reached 200 feet below the surface. More than 30 men worked either above or below ground at the mines.[25] In addition to the Spain and McKinley lodes, Allen worked a number of placer claims by hydraulic methods. More than fifteen miles of ditches carried water "to work several hydraulic giants, and an Evans hydraulic elevator,

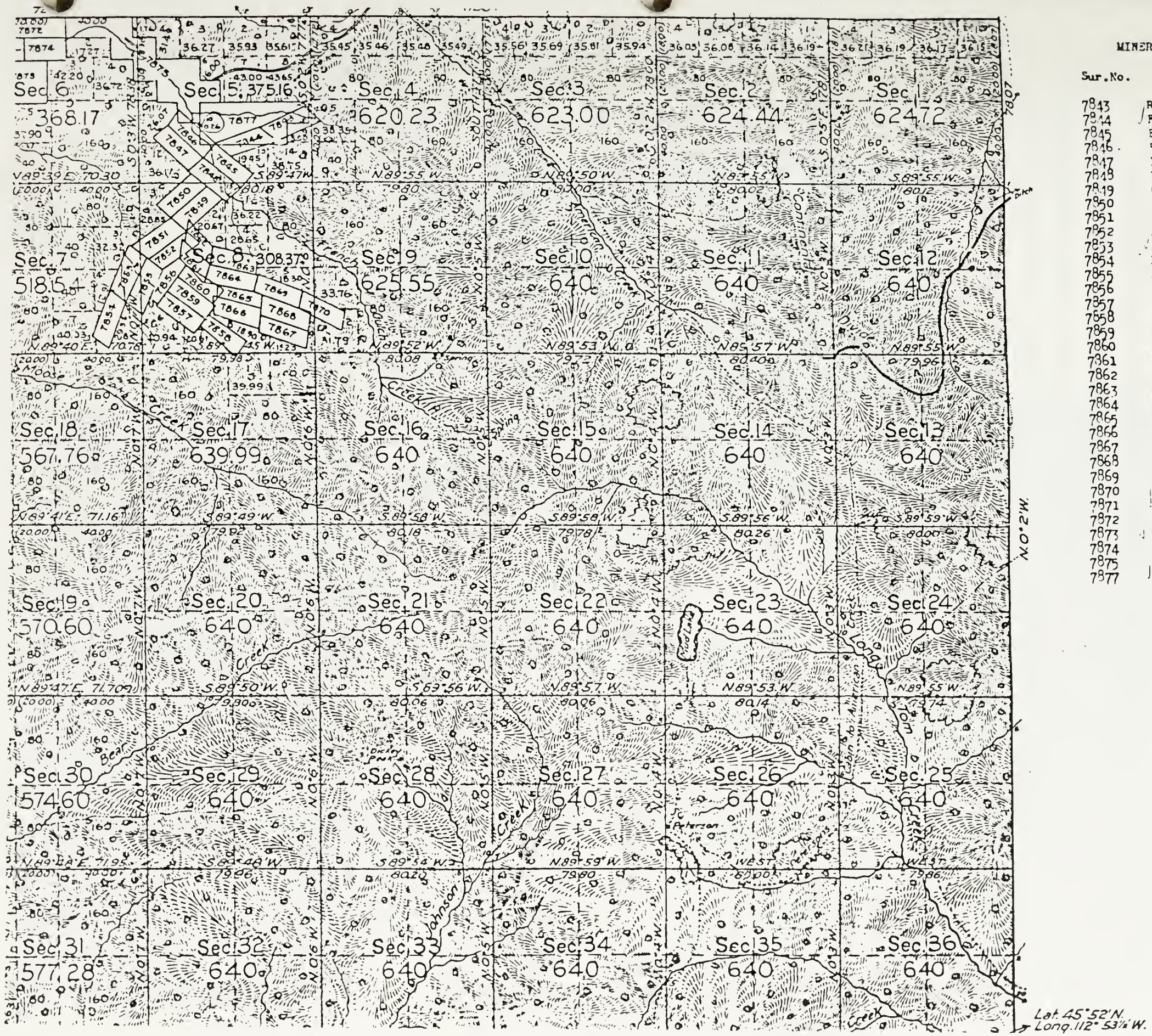

figure 3 General Land Office Survey Plat, 1926

MINERAL CLAIMS.

Sur. No.	Name.
7843	Ruth Lode.
7844	French Gulch Lode.
7845	Eureka Lode.
7846	Ester Lode.
7847	Lone Star Lode.
7848	Wm McKinley Lode.
7849	Golden Era Lode.
7850	Luckystrike Lode.
7851	Golden Crown Lode.
7852	Apex Lode.
7853	First Chance Lode.
7854	First Chance Ext. Lode.
7855	Swamp Lode.
7856	Junction Frac. Lode.
7857	Leo Lode.
7858	Star of the West Lode.
7859	Queen Lode.
7860	Dixie Frac. Lode.
7861	Florence Ext. Lode.
7862	Margaret Ext. Lode.
7863	Margaret Lode.
7864	Florence Lode.
7865	Ottumwa Fraction Lode.
7866	McKinley Lode.
7867	Trixie Lode.
7868	Salt Lake Lode.
7869	Spain Lode.
7870	Spain Ext. Lode.
7871	Legal Tender Placer
7872	Old Channel Placer.
7873	French Bar Placer.
7874	Spring Gulch Placer.
7875	Phoenix Extension Placer
7877	Julius Placer.

thus enabling the operators to handle an immense amount of gravel."[26] The elevator had a capacity to carry between 500 and 1000 yards of dirt and was used in areas where the stream gradient was too low to carry the sediments.[27]

In 1900, Allen installed a dredge in the French Gulch district. The "Mildred" was a boat dredge that had buckets for digging stream gravel and conveying it to a screen that separated the gold from the tailings. It was one of the first large dredges to be established in Montana.[28]

Through this combination of underground lode mining, hydraulic placer mining, and dredging the Allen Company succeeded in establishing a profitable business in French Gulch. Reportedly, several of the car loads of ore that were shipped from the district ranged as high as $19 per ton.[29]

William Allen continued his mining and timber operations at French Gulch during the first decade of the twentieth century. In 1904, he was elected to the Montana State Legislature as a representative from Deer Lodge County on the Republican ticket. In 1908, he was elected as Montana's Lieutenant Governor.[30] Allen retired from politics in 1913, shortly after his mining and timber companies developed financial problems. Ultimately, a shortage of operating capital forced Allen to withdraw from his ventures and to sell his property to the Anaconda Copper Mining Company.

The French Gulch Mining District was one of the more important gold mining areas in Deer Lodge County. Although the amount of gold that was recovered from Montana mines gradually decreased during the early 1900s, French Gulch continued to yield profitable paydirt.[31] Perhaps the large amount of capital that Allen needed to return a profit at French Gulch and his heavy investment in lumber operations overextended his financial capabilities. Nevertheless, as late as 1948, one informed geologist estimated that a profitable return of gold could still be dredged from the lower sections of California and Oregon Creeks.[32]

Above: *figure* 4. W.R. Allen's Spain Mine. Photo courtesy of the Deerlodge National Forest.

Left: *figure* 5. Hydraulic Mining in the French Gulch area, circa 1890. Photo courtesy of the Deerlodge National Forest.

Below: *figure* 6. View of a typical mining camp, German Gulch, circa 1890. Photo courtesy of the Deerlodge National Forest.

D. Early-Day Logging

Establishment of the community of Anaconda in 1883 and the consequent growth of the mining industry in Silver Bow and Deer Lodge Counties portended great changes for the Mount Haggin Area. Large amounts of timber were necessary not only to convert to charcoal for fueling local smelters, but also to produce mine "stulls" that could be used to support tunnels and shafts. The ridges surrounding Mount Haggin, with their vast acreages of lodgepole pine, offered a convenient source for this timber. No longer was the Area only noted for its mineral wealth. Forest resources now became an important commodity.

The earliest recorded, systematic timber cutting in the Mount Haggin Area was that of A. W. McCune. In the fall of 1883, McCune received a contract from the Anaconda Copper Mining Company to supply the new Anaconda smelter with 300,000 cords of wood. McCune selected the Mill Creek Canyon area as his source of supply. He began immediately to construct a wooden flume on which he intended to transport his cordwood from the canyon to Anaconda.[33] McCune diverted water for his flume from Mill Creek. Through use of this transport system, in combination with wagons and mules, he was able to satisfy his contractual agreements with the Anaconda Company. In the process, McCune laid waste hundreds of acres of prime timberlands. In decades to follow, the site of this harvest was known locally as the "McCune Cutting."[34]

A. W. McCune had selected the Mill Creek Canyon for his timber without much regard for the public's ownership of that land. The practice was fairly common during the later decades of the nineteenth century. Other would-be logging contractors also disregarded the status of federal lands on which they cut timber. There is at least one reported case of timber trespass in the French Gulch area in 1905.[35] Undoubtedly, a common belief that forest reserves were plentiful and available to anyone for the taking fostered similar trespass on the public domain during this period.

Creation of the Hell Gate Forest Reserve in October, 1905, and the Big Hole Forest Reserve one year later in November, 1906, helped to bring some measure of protection to the timber resources of the Mount Haggin

Area.[36] Two years later, lands from these reserves were divided into the Beaverhead, Bitterroot and Deerlodge National Forests. Most of the timberlands in the Mount Haggin Area were included in the Deerlodge National Forest.[37]

In order to more effectively administer the new national forest, the U.S. Forest Service[38] located a number of administrative sites, or ranger stations, throughout the forest. One such early site was the Waterloo Ranger Station, which was situated near California Creek (SE/4 SE/4 Sec. 17, T3N R11W).[39] A log cabin was erected on the site a few years prior to the federal government's withdrawal of the land in November, 1906. Before that date, the cabin served as a saloon and restaurant, run by an early French-Canadian resident of the French Creek Valley, Napoleon Tessier.[40] The location of this country inn was ideal, being situated adjacent to the county road leading from Anaconda to Wisdom, Montana. The feisty Napoleon Tessier did not look favorably on having his establishment condemned by a not-too-welcome federal agency. Though he contested the substitution of the ranger station for his saloon, he was not able to deny that his business operated on federal reserve land, in violation of trespass laws. Tessier's defeat at the hands of the Forest Service was locally known as Napoleon's "waterloo" and thence the official naming of this administrative site as the Waterloo Ranger Station.[41]

W. R. Allen Company and the Mines Timber Company

Having established the Deerlodge National Forest, and having located the necessary administrative sites, the Forest Service began a more orderly process of selling valuable timber in the Mount Haggin Area. There were eager buyers. One of the first and foremost was William R. Allen. Seeking to expand his mining operations in the French Gulch region, Allen applied for and secured a contract to cut 100 million board feet of timber from national forest land. The first contract was awarded in July, 1906. Allen immediately put his loggers to work building an extension to the old McCune-Mill Creek flume. In a short time, an

elaborate system of flumes was completed, drawing water from California, American Mill, and a number of other creeks in the area. Eventually, the flume extended more than eighteen miles into the French Gulch area. It was an engineering feat. The flume was V-shaped, with 24-inch sides. It consisted of 29 tressels, most of which were over 25 feet high. The highest tressel was 72 feet in height, and the longest was 775 feet in length. On its way from French Gulch to Anaconda, the flume passed through numerous rock-cuts and one 685-foot tunnel. The engineering marvel required more than 100,000 board feet of lumber in its construction and cost approximately $4,000 per mile to build.[42]

Timber above the flume was sent down the mountainsides by sleds or chutes. There, it was banked for eventual loading onto the flume. Timber that was cut below the flume was hauled up the mountainside by cables and a tramway.[43] The terminus for the cut timber was a loading yard in Mill Creek Canyon, approximately five miles southeast of Anaconda. From this location, a spur line of the Butte, Anaconda and Pacific Railroad carried timber to either Anaconda or Butte.*

The W. R. Allen Company forest operations were headquartered in French Gulch, probably in Section 5, T2N R11W. A General Land Office surveyor noted a sawmill in the northwest quarter of that section during a 1926 cadastral survey of the area. Probably, this sawmill had been associated with the Allen Company activities.

Timber harvesting on the French Gulch sale was extensive. Most of the timber was cut into cordwood lengths, or squared off with an adze to produce 8-foot mine stulls. Cutting by groups of between two and five sawyers occurred throughout the year. During the months of May to November, timber could be floated down the flume to the Mill Creek Canyon yard.[44]

The Allen Company's French Gulch Timber Sale suffered from numerous problems. Many of the difficulties were a result of the Forest Service's

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*Reportedly there is still evidence of the flume in the Mount Haggin Area. In addition, some remnants of logging chutes also may be visible, especially to the west of French Creek near Grassy Mountain.

figure 7. Flume at French Gulch, circa 1906. Photo courtesy of the Montana Historical Society.

figure 8. Flume at French Gulch, circa 1906. Photo courtesy of the Montana Historical Society.

figure 9. Mill Creek Canyon yard, circa 1906. Photo courtesy of the Montana Historical Society.

inexperience with the administration of a sale of this size. This inexperience was reflected in the fact that at least three different methods of timber selection were employed on the French Gulch sale between 1906 and 1917. The first method of harvest that was utilized prior to 1906 and during the first months of the sale simply allowed the loggers to select the mature trees. While such an approach may have been the most economical for the logging contractor, it did not necessarily insure a healthy residual stand.[45]

In late 1906, Forest Service personnel promulgated the "first definite marking rules" for the French Gulch Timber Sale. The rules required the cutting of timber in blocks.

> They provided for cutting clean strips 150 feet wide, running with the slope, with 75-foot strips between. These latter were divided into blocks 75 feet square, alternate blocks being cut clean and the remainder left for seed.[47]

The system offered an opportunity for planning the course of the timber sale and was certainly an improvement over past practices. Notwithstanding the benefits, the "seed block" method allowed for heavy exposure of trees, which resulted in a great deal of loss through windfall.

Consequently, in 1909, a new approach was found to marking trees for cutting on the French Gulch Timber Sale. Under the new rules, a "strip system" was established. The new cutting blocks were designated in strips from 100 to 500 feet wide. Timber within the strips was completely "clear-cut," while that between the strips was left intact. Although this new method of timber selection drastically reduced the amount of windfall on the sale, it resulted in the collection of a good deal of cordwood and small stulls that could not be economically marketed. Because of these deficiencies, the system was once again changed in 1910.

The new plan for marking commercial timber on the French Gulch sale utilized elements of clearcutting, selection cutting, and thinning. Trees were categorized for their maturity and exposure. The objective of the marking was not only the removal of merchantable timber, but also the "greatest possible increase of increment for the Forest."[48] Overmature trees with a high exposure factor were to be clear-cut, while immature trees would be subject only to thinning. The system was both reasonable

figure 10. Mine stulls piled at the French Gulch Timber Sale, circa 1906. Photo courtesy of the Deerlodge National Forest.

figure 11. W.R. Allen's French Gulch timber camp. Photo courtesy of the Deerlodge National Forest.

figure 12. U.S. Forest Service employees at the Waterloo Ranger Station, circa 1906. Photo courtesy of the Deerlodge National Forest.

and workable. It anticipated later systems of tree selection that accounted for various risk factors to standing timber. The final harvest plan for the French Gulch Timber Sale may be considered an early example of "sustained-yield" forestry practices.

Other problems plagued the French Gulch sale during its years of operation. One administrative problem that required resolution was the need for adequate record-keeping and map-making of the cutting areas.[49] This need was easily met within the first few years of the sale. A more serious problem, however, was not a product of Forest Service administration. Rather, it involved the economic solvency of the W. R. Allen Company.

Although heavily in debt to the federal government for timber cut under the 1906 contract, Allen applied for and received a new contract to cut 100 million additional board feet of timber from French Gulch in August, 1910.[50] By April of the following year, the company's over-extension finally got the best of it and W. R. Allen was in deep trouble. Although Allen had a contract for government timber and a ready market for the product in Anaconda and Butte, he did not actually own the timberlands. Therefore, bonding companies would not secure his operation. Without the necessary loans and bonds to finance his operations, Allen's contract was worthless.[51]

In an effort to salvage some remuneration from his investment, Allen arranged for the incorporation of a new firm, the Mines Timber Company, which would assume a deed for "all timber interests, including water rights, flumes, stock on hand, buildings, etc."[52] This company was financed largely by the Anaconda Copper Mining Company, which recognized the need to protect its source of supply for cordwood and mining stulls.[53] Officials of the Anaconda Company, including John Gillie, superintendent of mines in Butte, were listed as officers in the new logging corporation.[54]

In June, 1911, the Forest Service relieved the Allen Company of its contract obligations after the Mines Timber Company had paid the former firm's outstanding debts. The Mines Timber Company was awarded a new contract with the federal government for French Gulch Timber Sale.[55] Nels Pearson, who had been in charge of an Anaconda Company logging camp at

Gregson, was placed in charge of the French Gulch and Mill Creek Canyon camps. It is reported that at this time the French Gulch and Mill Creek camps consisted of numerous building, including blacksmith shops, veterinarian facilities, sawmills, and commissaries.[56]

The Mines Timber Company continued operations in French Gulch during the next five or six years. By 1915, it was estimated that more than $126,642 had been invested in the operation and approximately 79 million board feet of timber was cut.[57] Cutting continued on the French Gulch Timber Sale until 1917, when the contract had expired and all merchantable timber had been removed. At that time, the Mines Timber Company moved its logging activities to the Georgetown Lake area.[58]

The French Gulch Timber Sale was significant not only in the history of the Mount Haggin Area, but in the history of the Forest Service in Montana. It is reported to be the first large timber sale in Region 1. In addition, as previously noted, many of the marking rules and timber selection guidelines anticipated future cutting regulations. Gifford Pinchot, chief of the Forest Service from 1905 to 1910, visited the sale, probably in 1908, and was responsible for drafting the last set of harvest regulations.[59] W. R. Allen claimed that his logging operation was used to train Forest Service recruits. He later commented on his notoriety.

> One year, twelve representatives of the leading magazines and newspapers of the country came to gather information about the operations which, at that time, was the largest in the United States under government supervision. I felt like the proverbial goldfish in the bowl.[60]

Allen's assertion is somewhat exaggerated. Nonetheless, the importance of the French Gulch Sale to later practices on the national forests in Montana cannot be underestimated. Indeed, the former supervisor of the sale, D. T. Mason, used much of the data gathered at French Gulch in a monograph on lodgepole pine utilization and management in the United States.

The Anaconda "Smoke Case"

Much of the twentieth-century history of the Mount Haggin Area involves various conflicts between the Anaconda Copper Mining Company, its parent trust, the Amalgamated Copper Company, and local individuals who suffered from the affects of smelter fumes. Claims of damage to crops and livestock from the smelter's emissions were lodged against the Company by both private and federal officials. The controversy continued for more than twenty-five years, eventually resulting in the Anaconda Company's purchase of ranches in the surrounding area and in an exchange of property between the Company and the federal government.

Between 1883 and 1902, sulphur and arsenic emissions from the Company's Upper and later its Lower Works in Anaconda drifted south and southwest, causing serious damage to the forested lands in the Mount Haggin Area. In 1902, the Company completed its Washoe Smelter at Anaconda and smoke from the plant began drifting northeastward into the Deer Lodge Valley. Despite the erection of an enormous smokestack in 1903, fumes from the smelter continued to cause damage to crops and livestock in the valley.

The Deer Lodge Valley Farmer's Association, a group of prominent area ranchers who believed that their ranches had been damaged, formed in Deer Lodge County in 1905. That same year, the Association filed a lawsuit in federal district court in Helena, asking for an injunction to halt the Anaconda Company's new Washoe Smelter. The suit was filed on behalf of an absentee landowner by the name of Fred J. Bliss.[61]

During the next four years, the case moved slowly through the court. Led by Cornelius F. Kelley, the Anaconda Company defended its operation at the smelter by claiming that smelter fumes were not injurious to crops or livestock. Dr. Henry C. Gardiner, a young Bozeman veterinarian, headed a team of national scientists in the presentation of testimony in support of the Company.

For their part, the Deer Lodge Valley ranchers enlisted the aid of two chemists in the fight with the Company. Professors W. D. Harkins of the University of Montana in Missoula and R. E. Swain of Stanford University, Palo Alta, California, testified on behalf of the plaintiffs.[62] Both

individuals claimed that the results of their research in the Deer Lodge Valley proved conclusively that the smelter's emissions had harmed crops and livestock. Despite this testimony, the Anaconda Company successfully defended itself in the "Bliss Case" and in May, 1906, the court denied an injunction halting the plant's operation.[63]

Although they had defeated the Deer Lodge Valley Farmer's Association, Anaconda Company officials were not through with the "smoke case" controversy. Federal land managers also charged that the smelter's emissions had caused serious damage to trees in the Mount Haggin Area. Between 1906 and 1908, J. K. Haywood, a chemist for the Bureau of Chemistry, studied the affects of arsenic and sulphur fumes on the Hell Gate and Big Hole National Forests. He found that sulphur dioxide had killed trees for a distance of six miles south of the smelter.[64]

> South from Anaconda a road was followed that runs first southeast and then southwest across the divide and thence by a branch road to the neighborhood of Allen's Camp. A point was reached about 11 miles south of the smelter and 3 miles beyond the divide. Both the red firs and the lodgepole pines were badly injured all the way to the divide, beyond which for a distance of from 1 to 2 miles along the main road no red firs were growing; lodgepole pines were seen, however, many of which were injured and much discolored. When this region was visited in 1906 the injury to lodgepole pine practically ceased at the divide, while in 1908 it extended for a distance of from 1 to 2 miles beyond the divide. In the vicinity of Allen's Camp, at a point about 3 miles beyond the divide and 11 miles south of the smelter, no injury to either red firs or lodgepole pines was apparent.[65]

A short time later, Chief Forester Gifford Pinchot and Secretary of Agriculture James Wilson visited the Deerlodge National Forest. Their trip was ostensibly to examine the French Gulch Timber Sale, but they also reinvestigated the smelter damage on the forest.[66] Shortly after that visit, in 1908, the Department of Agriculture launched a comparative survey of smelter fume damage in Idaho and Montana. Professor George F. Pierce from Stanford University visited the Mount Haggin Area under the auspices of the Department in August, 1910. He reported that trees and smaller forms of

figure 13. Some of Dr. Henry C. Gardiner's scientific colleagues on a visit to the Mount Haggin Area. The man on the far left is Dr. V. A. Moore, who testified for the Anaconda Company in the Bliss Case. Photo courtesy of Henry E. Gardiner.

figure 14. Napoleon Tessier and Henry E. Gardiner, circa 1922. Photo courtesy of Henry E. Gardiner.

vegetation had been affected by smelter fumes as far south as Seymour Creek (Section 13, T2N R12W).[67]

The federal government filed a lawsuit against the Anaconda Company's parent trust, the Amalgamated Copper Company, in 1910. However, neither the government nor the Company was particularly anxious to pursue the matter in court. Protracted negotiations began almost immediately. Fifteen years later, after numerous studies, charges and counter-claims, a solution was finally worked out. The remedy required the Anaconda Company to exchange six parcels of land in the Mount Haggin Area and other areas near Anaconda for forested lands near Missoula and in the Bitterroot Valley. In addition, the Company took the initiative to purchase additional affected lands from either the Northern Pacific Railway Company or from smaller landowners.[68] In this way, the Anaconda Company acquired what is now known as the Mount Haggin Area. As one historian of the subject concludes, the settlement may have solved the Company's legal problems, but it did little to abate the air pollution problem in the Deer Lodge Valley.[69]

E. The Livestock Industry at Mount Haggin

Early Cattle and Horse Operations

The history of livestock production in the Mount Haggin Area is as fascinating as that of mining or lumbering. The French Creek Valley is considered a part of the "Big Hole Country" and, therefore, receives recognition for its lush natural hay meadows and its ability to support cattle and horse herds. The valley's period of agricultural development is contemporary with that of other segments of the Big Hole region. As a result, many of the factors that influenced the settlement in lower valleys also affected the Mount Haggin Area. One major difference between the evolution of agriculture in the French Creek Valley from that in other regions in the Big Hole Basin is the former valley's proximity to the major industrial center of Anaconda. Unlike other areas in the Big Hole and western Montana, the strength of the Anaconda Copper Mining Company's grasp on the Deer Lodge Valley directed

agricultural use of the area surrounding Mount Haggin.

Considering the relatively early settlement of the Mount Haggin Area during the placer mining days of the late 1860s and early 1870s, the livestock industry arrived late to the French Creek Valley. Undoubtedly, there were miners who, frustrated with diminishing placer prospects, turned to the supporting industry of cattle raising. Johnny Seymour, for whom Seymour Creek is named, was one such French Gulch miner who turned from prospecting to farming.[70]

Although it is likely that Seymour was not alone in his recognition of the value of this land, the first suggested reliance on the French Creek Valley for pasturage is not until the mid-1880s. A. W. McCune, the logging contractor who agreed to supply the Anaconda Copper Mining Company with cordwood, reportedly used the valleys near Mount Haggin to graze horses and mules.[71] The animals were employed to haul wagons of cordwood from the cutting areas to the smelter site in Anaconda.

One knowledgeable source believes that McCune grazed many of his mules on a pasture on Oregon Creek.[72] For this reason, the site became known as the Mule Ranch.* Either at this time in the mid-1880s or sometime during the next two decades, a mule and horse barn was constructed at the ranch. It stood near the present sheep-shearing building.[75]

The Big Hole Valley in southwestern Montana is one of the highest and coldest in the state. As such, it was one of the last to be settled by agriculturalists. Ranchers from the Deer Lodge and Beaverhead Valleys used the Big Hole for summer pasturage during the mid-1870s, but not until after the famous trek of Nez Perce Chief Joseph through the valley in 1877 did permanent settlers first arrive.

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*This explanation for the naming of the Mule Ranch is plausible. It is known that A. W. McCune used mules in his operation and it is likely that he would need a summer pasturage near the site of his activities. A later resident of the Mule Ranch believed that the name derived from the fact that mules and horses from the mines in Butte were turned loose to graze at the ranch during the 1920s.[73] This opinion has been confirmed by another informant.[74] However, the second informant, who predates the first, states that the Mule Ranch acquired its name well before the 1920s.

In 1877, two men, Gilmore and Salisbury, surveyed a road through the Big Hole country between Bannack and Missoula. Although the road did not prove feasible, one of the stage stations that they had erected at Wisdom became the residence of the valley's first settler, Alvin Noyes. Noyes arrived in the Big Hole in 1882. Settlement of the valley proceeded steadily from that date, although harsh winters and deep snows made transportation to and from the valley extremely difficult.[76]

The establishment of ranches in the Mount Haggin Area also was a later phenomenon in the history of southwestern Montana. In 1889, John B. Parenten filed a "homestead entry"[77] to 160 acres adjacent to Pronto Creek (SW/4 Section 8, T2N R12). In that same yaer, one John B. Lindsay purchased a 160-acre parcel of land along Deep Creek, a tract later known as the "Home Ranch" (S/2 NW/4, NE/4 NW/4, NW/4 NE/4 Section 9, T2N R12W).[78] Two years later, in 1891, Jacob Barnowsky bought a quarter-section of bottomland at the juncture of Moose and French Creeks in Section 1, T2N R12W.[79] This tract, along with an additional 320 acres in Section 2 and one in Section 34, T3N, R12W, located by Barnowsky in 1909, came to be known as the "Barnowsky Place." While most of the buildings were removed from the ranch during the 1950s, remnants of a gate and one log structure, possible associated with the ranch, are still visible.

Other early settlers to the French Creek Valley included one Matthew Parkerson, who filed on land in Section 8, T2N R12W, in 1903 (S/2 SE/4, NE/4 SE/4, NW/4 NW/4, NE/4 SW/4).[80] In 1902, George Welcome purchased the Lindsay property along Deep Creek (Sections 4 and 9, T2N R12W).[81] It is at this time that most of the buildings at what became the Home Ranch were probably built.[82] Welcome also acquired the property known as the Mule Ranch (Section 25, T3N R12W) during this transaction in 1902.[83] It is possible that some of the buildings at that ranch, perhaps the early horse and mule barn, were constructed at this time. (See Part III for site descriptions of the Mule and Home Ranches.)

An interesting story dates from this turn-of-the-century period and attests to the notoriety of the French Creek region for horse and cattle raising. During the late 1890s, concurrent prosecution of the Spanish-American War in Cuba and the Phillipines and the Boer War between the

British and Africaners in South Africa produced an acute shortage of horses and mules world wide. Both United States and British quartermasters traveled throughout the western United States in search of suitable mounts. According to one story, such a British commission visited the Home Ranch. Any horse that would carry a saddle and could be ridden around the corral was considered "broke" by the army purchasers. If any of these animals ever arrived in South Africa, they undoubtedly held a few surprises for their unsuspecting riders.[84]

Numerous small ranches were established along Deep and Sullivan Creeks during the last decade of the nineteenth century. Within the Mount Haggin Area, especially north of Deep Creek (specifically T3N R11 and 12W), settlement was greatly restricted by the ownership of land. Many sections within the French Creek Valley were deeded to the Northern Pacific Railway Company as part of its original land grant.[85] These tracts were primarily odd-numbered sections. Most of the land that was not granted to the railway company was withdrawn as federal forest reserve. It was this block of acreage that eventually formed the basis of the land exchange between the U.S. Forest Service and the Anaconda Copper Mining Company (those sections lying primarily in T3N, R11 and 12W).[86] The federal government allowed the selection of some "forest homesteads" on the reserved land during the first decade of the twentieth century.[87] Nonetheless, withdrawal of much of the desirable agricultural acreage prevented further entry by settlers.

Although much of the timber and agricultural land in the Mount Haggin Area was owned by either the Northern Pacific Railroad or the U.S. Government, use of the suitable pasturage was not totally restricted. Beginning in the 1910s, the Anaconda Copper Mining Company began leasing acreage near the Mule Ranch. Through a subsidiary, the Deer Lodge Valley Farms Company, ACM grazed cattle, sheep and horses on federal land. It did so in a widely publicized effort to demonstrate the non-toxic affects of smoke from the Washoe smelter. Dr. Henry C. Gardiner, the Bozeman veterinarian who had entered the employ of the Anaconda Company during the 1907 "smoke cases," managed the "farms department" for the mining company.

Henry Gardiner was born in Ontario, Canada, in 1879. As a young man

he came to Montana via the promotion efforts of the Great Northern Railway Company.[88] He entered Montana State University before the turn of the century and, upon graduation in 1903, traveled east to Chicago in order to pursue a career in veterinary medicine. He returned to the Gallatin Valley following his graduation from that institution.[89]

Gardiner established a reputable practice in Bozeman, which brought him to the attention of Anaconda officials during the controversy of 1905-1907. As the company's principal witness during the Bliss Case, Gardiner was responsible for presenting the findings of Amalgamated's expert witnesses. (These included a number of gentlemen of note: Theobald Smith of Harvard University, V. A. Moore of Cornell, Leonard Pearson of the University of Pennsylvania, and Dr. Duncan McNab McEachran of the Canadian Government Veterinarian Service.[90]) Through an able synthesis of the scientific fundings, Gardiner was able to defend the position that the company's emissions did not appreciably affect most farmers in the Deer Lodge Valley.[91]

In May, 1909, Judge W. H. Hunt delivered his verdict denying an injunction to halt the operation of the Washoe Smelter. Soon after that decision, the Anaconda Company purchased the Bliss property at Willow Glen and hired Dr. Gardiner to supervise the establishment of a model ranch. From this headquarters ranch, Gardiner oversaw the activities of experimental farms in the Deer Lodge Valley.[92] Grain and cattle were raised on lands in the valley, while pasturage in the Mount Haggin Area served as summer grazing land for cattle and for production of hay. Reportedly, prisoners from the Montana State Prison in Deer Lodge worked on the summer hay crews.[93]

Not satisfied with simply using pasturage in the area, Anaconda Copper Company officials began an active program to acquire land in the Mount Haggin Area. They did so both in an effort to provide yearly summer pasturage for Dr. Gardiner and to prevent further lawsuits from irate ranchers and federal administrators who claimed damage from smelter fumes. Between 1917 and 1935, the Anaconda Copper Company acquired title to the area now known as Mount Haggin. Most of the land in Township 3 North, Ranges 11 and 12 West, was obtained either from the Northern Pacific Railway Company or through land exchanges with the U.S. Forest Service. Land south of

these townships (principally T2N, R11 and 12W) was purchased from private owners.[94] In 1917, the Company completed a complicated land transfer by which it acquired the Mule and Home Ranches from George Welcome. That same year, the mining conglomerate purchased the Alphonse Caron ranch in Section 32, T2N R12W, and the Barnowsky ranch in Sections 1 and 2, T2N R12W, and Section 34, T3N R12W.[95] The copper company's ability to consolidate its holdings in the French Creek Valley furthered the ambitions of Dr. Gardiner.

Henry C. Gardiner was a multi-faceted individual. He not only promoted the advancement of agricultural techniques on the Anaconda Company's farms, but sought the betterment of its workers. Through Gardiner's efforts, the community of Opportunity was established and platted into 10-acre plots. The plots were sold by the Anaconda Company to the Deer Lodge Valley Farms Company, which in turn sold them to workers from the Anaconda smelter. In this way, Gardiner hoped to provide a rural atmosphere for the smelter company's employees.[94]

Dr. Gardiner's principal interest was in the propagation of pure-bred sheep. He recognized that Montana, with its abundant grazing lands, was prime sheep-raising territory. The high mountain valleys of western Montana, like those of Mount Haggin, were ideally suited to the summer pasturage of sheep flocks. Through Gardiner's efforts, the French Creek Valley slowly relinquished its fame for cattle and horse grazing for that of sheep.

Establishment of the Sheep Industry in Montana

The sheep industry in the United States is at least as old as the establishment of the first English colonies in the New World. The first sheep arrived on the eastern seaboard at Jamestown in 1609. During the next two centuries of colonization, most of the middle and northern colonies acquired substantial flocks.[97] Most of these earlier sheep were imported from England and were not pure breeds. They can be considered a common sheep that was bred for good foraging techniques and produced a wool of "indifferent quality."[98]

The first pure strain of sheep to arrive in the eastern colonies was a Spanish merino variety. They first appeared in 1793 and, between 1808

and 1830, were introduced heavily into American flocks.[99] It was this breed of sheep that became common to the range flocks of the United States, not only in the east, but also in western states, where they had been circuitously imported from old Mexico.

The merino produced a wool that was fine in texture and quality. This type of wool was receiving increasing demand during the early decades of the nineteenth century as an infant American textile industry tried to compete with a long-established European wool industry. Despite the rising demand for wool and a dramatic increase in the importation of merino sheep after 1811, sheep-raising in the United States remained a secondary activity on most American farms. Only when the sheep industry drifted into the far west during the late 1860s and early 1870s did it become a major and sole enterprise.[100]

Abundant and cheap land attracted sheep to the far west. On vacant public lands, especially in the Rocky Mountain states, sheep could be raised for a much lower cost than they could in the more populous eastern states. Between 1870 and 1880 the number of sheep in the United States nearly doubled from 28.5 million to 42 million. Much of that increase came from the West where the number of sheep rose from 4.6 million to 18.2 million during the same period.[101]

The first sheep to arrive in the West were of a Mexican stock, which was a degenerated merino breed. While in California and Oregon during the 1820s to the 1860s, they were cross-bred with purer merino strains. These were the sheep that moved into Montana, Idaho and Wyoming during the 1870s. They were not only well-adapted to harsh, open-range conditions, but produced a relatively find quality wool clip.

There is some dispute as to precisely when the first sheep flocks arrived in Montana. They may have been present at St. Mary's Mission in the Bitterroot Valley as early as 1847. It also is conceivable that they were brought into the Bitterroot in 1857 by one Thomas Harris, a partner of Major John Owen at Fort Owen.[102] Whatever the date for the first arrivals, it seems clear that one of the earliest large flocks to be driven into Montana was herded by John F. Bishop and Dick Reynolds. Both men

traveled to Portland, Oregon, in July, 1869, and returned to the Beaverhead Valley with 1500 head of sheep. After wintering at the John Selway ranch on Black Tail Creek, Bishop moved the sheep to his ranch in the Beaverhead.[103]

Most herders drove the first flocks from California, Oregon and Idaho over Monida Pass to western Montana. Consequently, the Beaverhead and Deer Lodge Valleys received the largest proportion of sheep during these first decades. In 1871, Philip Poindexter and William Orr, two noted stockmen in the Beaverhead Valley, grazed some 2400 head of sheep. The Deer Lodge Valley to the northwest had 387 sheep in 1869. Scarcely nine years later, in 1878, the county boasted 15,000 head of sheep.[104]

Sheep ranching in Montana spread rapidly during the 1880s and 1890s. Removal of the Indian threat in the southeast part of the territory allowed sheep to graze on the open range alongside thousands of head of cattle. During the early 1880s, sheep moved into the lush Judith Basin and, by the late 1890s, had pushed into the farthest reaches of northeastern Montana. In 1910, Charley Bair of Montana claimed to have the largest sheep-growing operation in the country. He raised sheep on more than 284,000 leased acres of the Crow Indian Reservation in southeastern Montana. In 1910 alone, Bair shipped 47 train-car loads of wool to a Boston wool dealer.[105] In 1900, Montana reportedly led the nation in sheep production by producing more than 26 million pounds of wool.[106]

Montana sheepmen, as did cattlemen, began to improve their flocks at an early date. Rambouillet sheep, an improved merino type, were cross-bred with various breeds, including Cotswolds and Lincolns.[107] Many of the experimental breedings occurred on western Montana ranches. The ranch of Peter Pauly and Charles H. Williams in the Deer Lodge Valley became one of the west's leading producers of Rambouillet sheep.[108] Although eastern Montana ranches boasted larger numbers of sheep, the ranches of western Montana soon received national notoriety for having the largest pure-bred flocks. Dr. Henry C. Gardiner's efforts in sheep raising at Mount Haggin rivaled his contemporaries.

The Mount Haggin Land and Livestock Company

In 1923, Henry Gardiner traveled to England to study the Hampshire breed of sheep. Impressed with this relatively large, fast-growing breed, Gardiner purchased a number of yearling rams and imported them to western Montana. A short time later, Gardiner, in partnership with E. O. Selway of Dillon, formed the Selway-Gardiner Sheep Company and began running his sheep flocks in the Mount Haggin Area.[109]

By arrangement with the Anaconda Copper Mining Company, Dr. Gardiner leased the company's land at Mount Haggin. The arrangement was continued a short time later, when the Selway-Gardiner partnership ended and the Mount Haggin Land and Livestock Company was formed. The corporation was a family enterprise, jointly owned by Dr. Gardiner, his wife and young Henry E. Gardiner.[110]

Dr. Gardiner was an innovator of sheep-raising techniques. He utilized a precise system of selection for breeding. Since Hampshire sheep are noted for their quality as mutton and their ability to gain weight rapidly, Gardiner devised a system that produced the higest quality lambs. Each ram and ewe was evaluated and tallied according to type and conformation. They were sorted in such a manner that the best rams could be bred to the best ewes. Rams with the highest "prepotency" rating were marked with a "red dot" to signify their desirability. A numbered ear tag on each ewe corresponded with a master tally sheet that identified her lineage. In this way, Gardiner could select the 80 or more ewes that would be bred with a particular "red dot" ram. The system was scientific and required the keeping of precise records. It also necessitated the construction of special corrals and sorting chutes.

The Home and Mule Ranches were the centers for summer operations of the Mount Haggin Land and Livestock Company. The structures at the ranches reflected the application of Dr. Gardiner's breeding system. Corrals and sorting pens were unusually large and elaborate. Chutes were constructed in such a manner that ewes could be funneled into specific pens. Each evening at the Mule Ranch during the breeding season, as the flocks were

figure 15. A typical sheep herder's wagon that was used by employees of the Mount Haggin Land and Livestock Company, circa 1930. Photo courtesy of Henry E. Gardiner.

figure 16. Breeding corrals at the Mule Ranch, circa 1930. Photo courtesy of Henry E. Gardiner.

driven into the sorting pens, a shepherd would call out the number on the ewe's ear tag. Gardiner, or a delegate, would consult a master tally sheet and would select the gate that should be opened for that animal. Once in the breeding pens, Gardiner would identify the specific ram that should be placed with the designated ewes.[111] Most of these ingenious sorting pens are no longer standing at either the Mule or Home Ranch. An exception may be the one corral complex that is situated a mile east of the Home Ranch (see Figure 32).

Other structures at the Mule Ranch also evidence the Gardiner breeding system. A structure (Historic Structure #7) that is located southwest of the Mule Ranch house (Historic Structure #3) was used as a holding pen for rams. The interesting 2x4 slat flooring was designed to provide ventilation to the pen. Rams that were kept cool were considered more potent than those that received no shelter from the summer heat. This building was commonly known as the "Buck Palace."[112] The benefits of such a structure have since been recognized.

Another interesting complex at the Mule Ranch was the sheep dipping area (Historic Structure #9). Dipping of sheep in some form of insecticide after shearing is an important activity on any sheep ranch. Customarily, once shorn, sheep would be forced into a long trench or a pool which contained the liquid disinfectant. Directing sheep into the trench or pool, however, was no easy task. On the Mule Ranch, Gardiner devised a turn-style gate that automatically forced the sheep into the dip (Figure 28).

Shearing sheep was, of course, a necessary part of the sheep ranch operations. On the Mule Ranch, where most of the shearing was done, it occurred in the shearing shed (Historic Structure #1). Permanent overhead clippers, driven by compressed air, were employed to remove the wool, The fleece was then loaded in sacks and temporarily stored in an accompanying shed. The operation at the Mule Ranch illustrated the twentieth-century change from hand-shearing to machine shearing. The process was both more efficient and less likely to mutilate the sheep. The sheep shearing shed at the Mule Ranch is still fairly intact (Figures 17 and 27).

Some of the buildings at the Mule Ranch were either constructed during

the tenure of the Mount Haggin Land and Livestock Company, or were moved onto the property during that period. The main house is said to have been moved from the Jacob Barnowsky homestead at Moose Creek during the late 1940s or early 1950s. The Sheep Shearing Shed and Dipping Complex were built especially for Gardiner's sheep ranch operation.[113] Two barns (Historic Structures #2 and #4) were built prior to the sheep operations, presumably during the days that cattle and horses grazed in the area. In addition, the original bunkhouse (Historic Structure #5) reportedly was at the site before the sheep ranching activities began. (See Figure 24.)

While sheep operations were centered at the Mule Ranch during the days of the Mount Haggin Company, the headquarters for the company's operations were at the Home Ranch. It was here that the foreman for the ranch lived, along with many of the hired hands. The ranch's horses were housed in the Home Ranch's horse barn. Before the introduction of sheep in the mid-1920s, the Mule Ranch was occupied seasonally, while the Home Ranch maintained a foreman year-round. By the late 1920s, both ranches housed only a summer staff.

Henry Gardiner's Mount Haggin Land and Livestock Company was widely acclaimed for its production of prize winning Hampshire sheep. Gardiner employed a special sheep handler, Tom Drummond, to show his sheep at stock shows throughout the United States. During the 1920s and 1930s, Gardiner's rams won numerous awards at these competitions. One enthusiastic reporter considered the Gardiner sheep to be the largest Hampshire flock in the world.[114] Whether this tribute is accurate or not, the activities of Dr. Henry C. Gardiner and his Mount Haggin Land and Livestock Company certainly claim distinction in Montana's sheep industry history.[115]

The Later Years of the Mount Haggin Land and Livestock Company

Dr. Henry C. Gardiner continued to raise his Hampshire sheep in the Mount Haggin Area until 1956. At that time, Dr. Harry Ferguson purchased the company from Gardiner. Ferguson had been an understudy to Gardiner since 1953. As an employee of the Anaconda Copper Mining Company, Ferguson

figure 17. Shearing plant in operation at the Mule Ranch, circa 1930. Photo courtesy of Henry E. Gardiner.

figure 18. Breeding band at the Mule Ranch, circa 1930. Photo courtesy of Henry E. Gardiner.

continued to lease the Mount Haggin Area for his sheep operation.

In 1965, William O'Neil and Dr. Ferguson joined together to form a new company, the Mount Haggin Livestock Company. At that time, the partners acquired title to the Mount Haggin Area from the Anaconda Company. Several years later, in 1972, O'Neil purchased Ferguson's interest in the Mount Haggin Company. The company's remaining Hampshire sheep were sold to an Idaho firm in 1975. In 1976, the Nature Conservancy acquired the Mount Haggin Area from the Mount Haggin Livestock Company and donated it to the State of Montana.

PART III

SITE ANALYSIS OF MULE RANCH AND HOME RANCH

A. Mule Ranch (Site 24DL172)

Site Description

The Mule Ranch is located in the Mount Haggin Area of Deer Lodge County (SE/4 NE/4 Sec. 25, T3N R12W, and NW/4 SW/4 Sec. 30, T3N R11W). State Highway 274 provides access to the site.

The Mule Ranch consists of nine buildings and associated corrals that are situated in a grassy meadow along the foothills of the Continental Divide. Much of the timber on the hills that surround the ranch has been cut or killed by sulphurous smelter fumes. California Creek is located less than a quarter-mile to the southeast of the ranch. Sixmile Creek winds its way through the Mule Ranch site.

Site integrity is relatively good, with the exception of some erosion problems and possible removal of some historic materials. Water overflows the banks of Sixmile Creek during the spring. This flooding has caused visible damage to at least one building at the site (Historic Structure #4, Barn). A house (Historic Structure #3) also has been flooded by the creek, although damage to the structure appears minimal. Some historic materials, particularly fences and corrals, may have been removed from the site during the past few years.

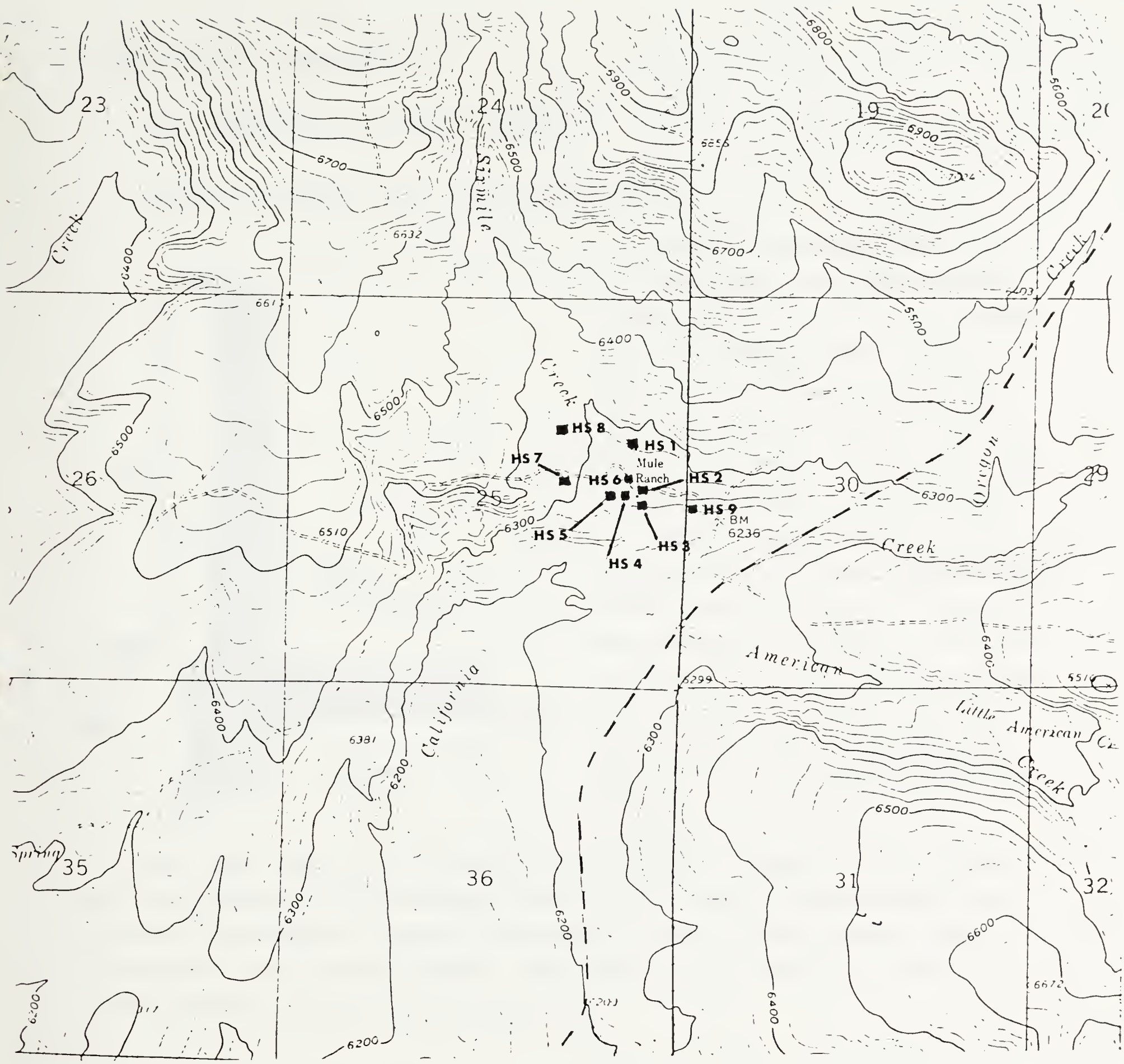


figure 19. Site Map: Mule Ranch

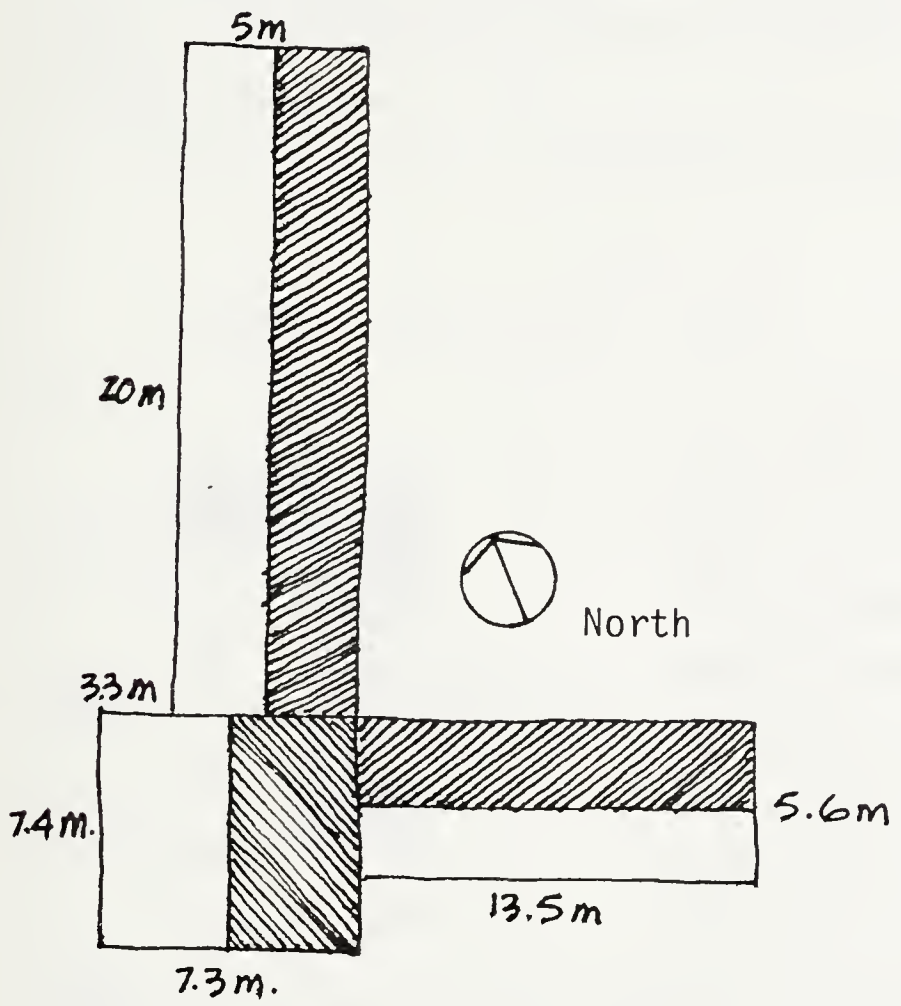
section 25 T3N R12W
section 30 T3N R11W

USGS 7.5 min.
Lincoln Gulch

Architectural Descriptions

All drawings are in meter lengths.

Historic Structure #1: Sheep Shearing Shed

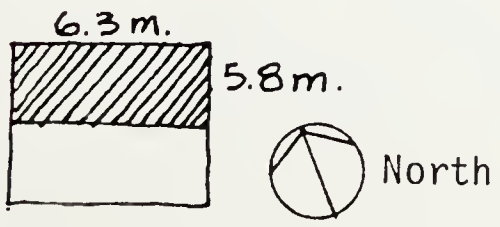


The sheep shearing shed is an "L" shaped, one-story post and wood frame structure. At the intersection of the two wings of the "L" is a one and a half story wood storage shed. The south wing was used as a holding pen for the sheep, and the north wing was used for shearing of the sheep.

The "L" shaped portion of the structure has horizontal board siding on the outside of the "L." Many of these boards are missing. The interior of the "L" has a series of board gates, many of which are missing. The wool shed has corrugated metal siding, as do the pitched gable roofs on the whole structure.

The floor structure of boards on logs has deteriorated, making sections of the southeast end and northwest end unstable. The corrugated metal roof also has deteriorated, causing some damage to the roof and allowing water into other areas of the structure. The structure as a whole is in fair to poor condition and needs to be stabilized.

Historic Structure #2: Barn



This one-story barn structure is constructed of 8-inch logs with a pitched gable roof. The logs are hand-hewn at the corners with a double-lap joint notch. The logs have wood chinking in the

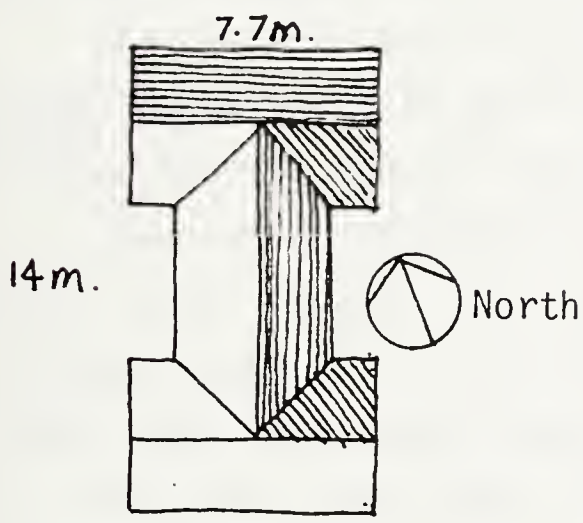
interior and no chinking or daubing on the exterior. The sill logs are placed directly on the ground. There is an earth floor in the structure.

The roof consists of a pole frame and a 1x6 board sheathing. There is no roofing material on the structure at this time. The gable ends are made of 1x6 boards and there is an opening in the west gable end.

The double swinging doors are missing from the east end. One of the doors is being used as part of a temporary outhouse in the northwest corner of the structure.

The structure as it exists is in relatively good condition.

Historic Structure #3: House



The one-story house structure is constructed of logs in an "H" shaped plan. The logs are hand-hewn at the corners with a double-lap joint notch. The log areas around the windows and in the east and west porches are also hand-hewn. The structure sits on a partial poured concrete foundation.

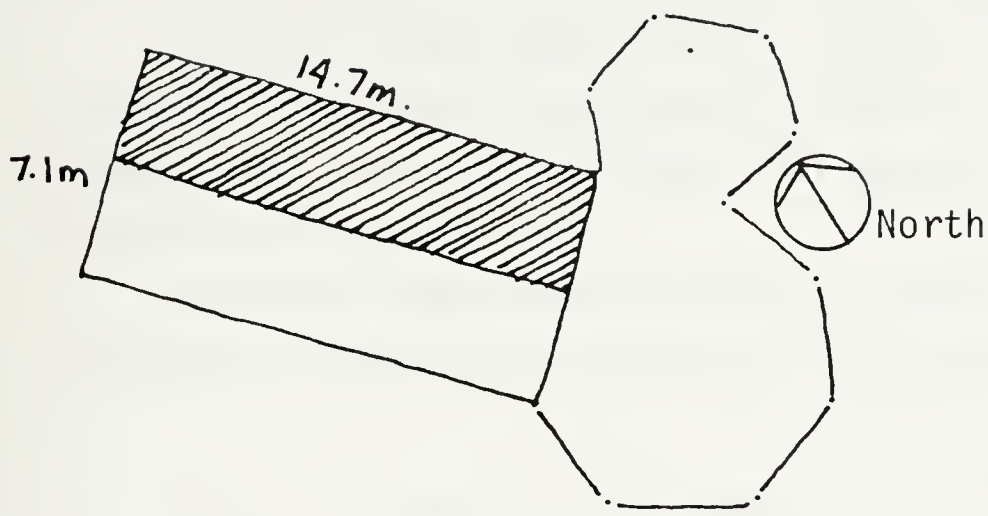
The structure has an intersecting pitched gable roof of corrugated metal. The gable ends are either metal or board. There are brick chimneys at the two intersecting roof locations.

The wood windows are either 2/2 or 4/4 double-hungs. The wood paneled doors have a glass panel in the upper half. There is a wood screen door.

The log interior walls have a fiberboard attached over them. The kitchen area is being remodeled with barn wood, imitation brick, and formica cabinets.

The structure is in fair shape.

Historic Structure #4: Horse Barn



The two-story barn structure is constructed of 10"-12" logs, hand-hewn on the interior. There is a double-saddle notch at the corners in the bottom four or five logs and a single-saddle notch in the logs above. There is wood chinking on the interior logs and mud daubing on the exterior. The sill logs rest directly on the ground and the southwest corner is being eroded by the stream.

The pitched gable roof is of corrugated metal. The gable ends are wood board and batten with openings at both ends. The door on the west end is made of wood boards, and the one on the south is made of plywood.

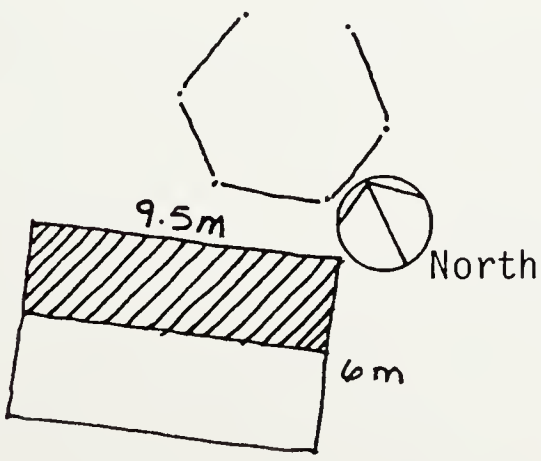
There is an interior log partition at the center of the building with horse stalls in both ends. The lower floor area has deteriorated from use over the years. The loft floor is made up of log beams with 4"x4" wood joists and a board and batten floor.

The roof rafters are 4"x4" and are not adequate for the load of the roof, causing it to sag in the center. This may also be the reason for the structure to be leaning in an easterly direction.

There is a pole corral on the east end of the structure.

The building is in fair condition.

Historic Structure #5: Bunkhouse



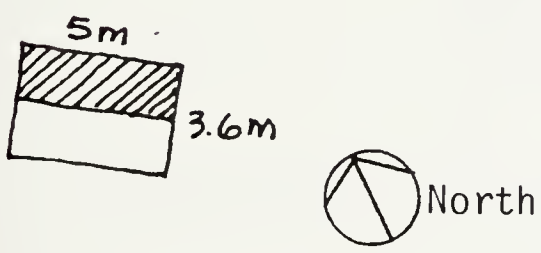
The two-story bunkhouse structure is constructed of 8"-10" logs with a saddle notch at the corners. The interior logs are hand-hewn. The logs have wood chinking on the interior and a combination of wood chinking and mud daubing on the exterior.

The pitched gable roof and gable ends have board and battens on them. The exterior doors are missing from this structure, and all of the double-hung windows with the exception of some sashes are missing.

There is a hand-hewn interior log partition with a wood paneled door. The wood flooring is buckling and deteriorating in some areas. The loft floor is on two levels and has flat boards on the west half and boards with battens on the east half.

There has been some settlement in the structure, causing some stress problems in the floor structure. The building is in fair condition.

Historic Structure #6: Cabin



The one-story log cabin is constructed of 8" logs with a flat notch at the corner. The sill logs sit directly on the ground. The logs have wood chinking on the interior and mud daubing on the exterior.

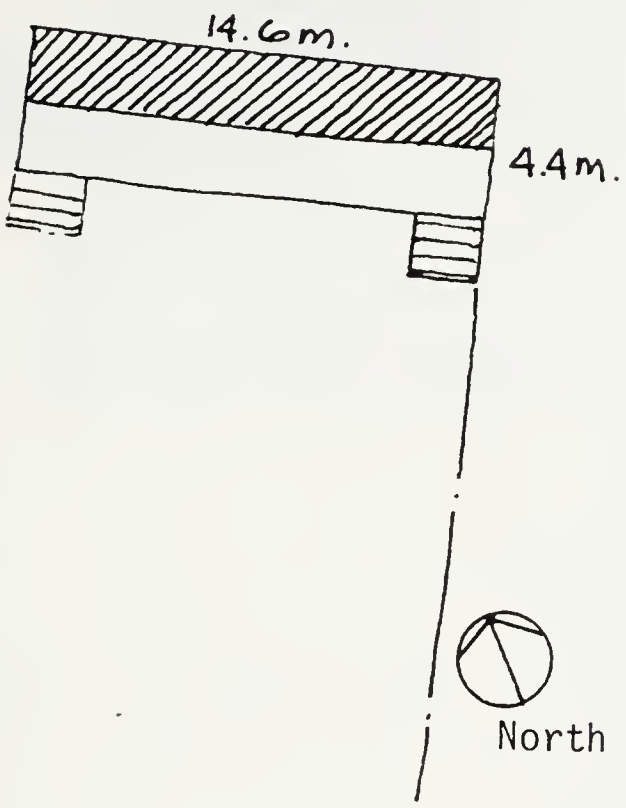
The board and batten roof is supported by log purlins. The log walls extent into the gable ends.

There is a wood door made of boards on the east side and a double-hung wood window on the south. The area below the window has been filled with logs, suggesting that a door existed there at one time.

The cabin as a wood floor on the interior.

The cabin is in fair condition.

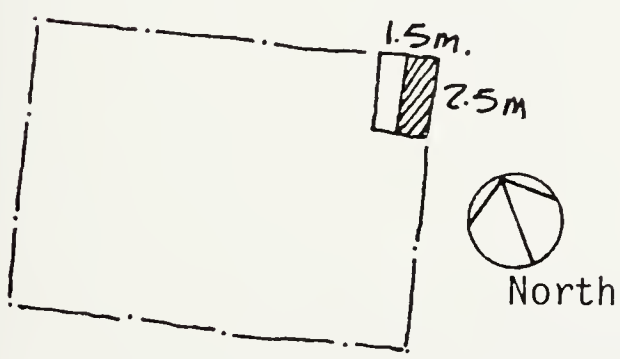
Historic Structure #7: Sheep Shed (Buck Palace)



The one-story sheep shed is a post and pole structure with vertical board side. The siding runs half-way up the wall on the north and south sides and into the gable ends on the east and west ends. The pitched gable roof has a board sheathing on the pole rafters, but no roofing material.

The floor in the interior is made of 2x4's placed on edge with spaces in between. The floor is approximately 3 feet off the ground to allow ventilation under the structure. There are log ramps to the floor on either end of the south side of the building. The structure is in fair condition.

Historic Structure #8: Shed

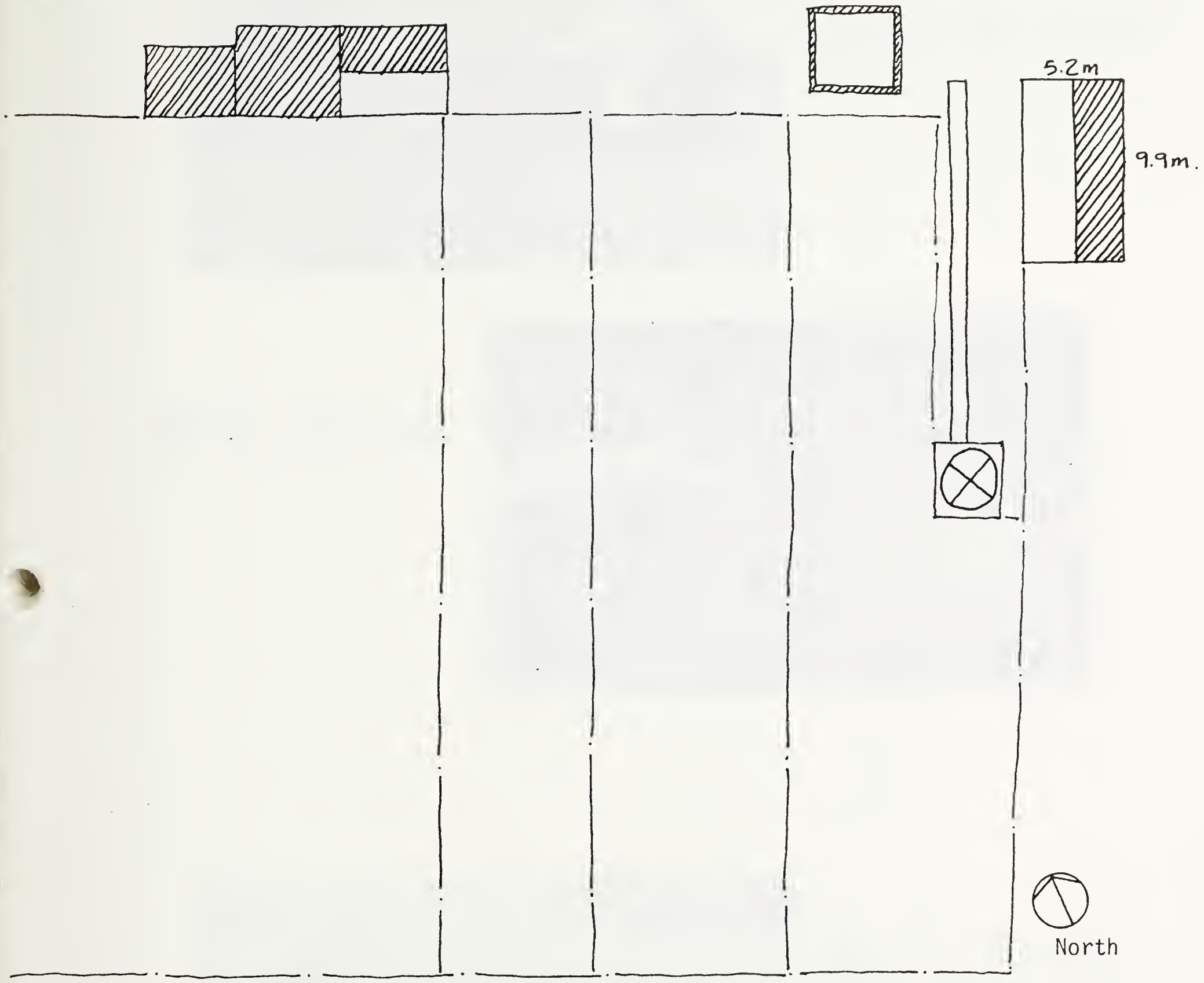


The shed is a wood frame structure with board siding built 2 feet off the ground on six piers. This structure has a corrugated metal pitched gable roof.

The structure has a wood floor. The two two doors on the north and south sides are missing. The structure sits in the northeast corner of a post and pole corral, most of which has been removed.

The structure is in fair condition.

Historic Structure #9: Sheep Dipping Complex



The sheep dipping complex consists of several structures surrounded by corrals made of posts and poles with vertical board siding. There are loading chutes in the north end.

The structures include a one-story, hand-hewn boiler building. It has a lap notch in the corners. There is a corrugated metal pitched gable

figure 20. Main house (HS-3) at the Mule Ranch, looking west.

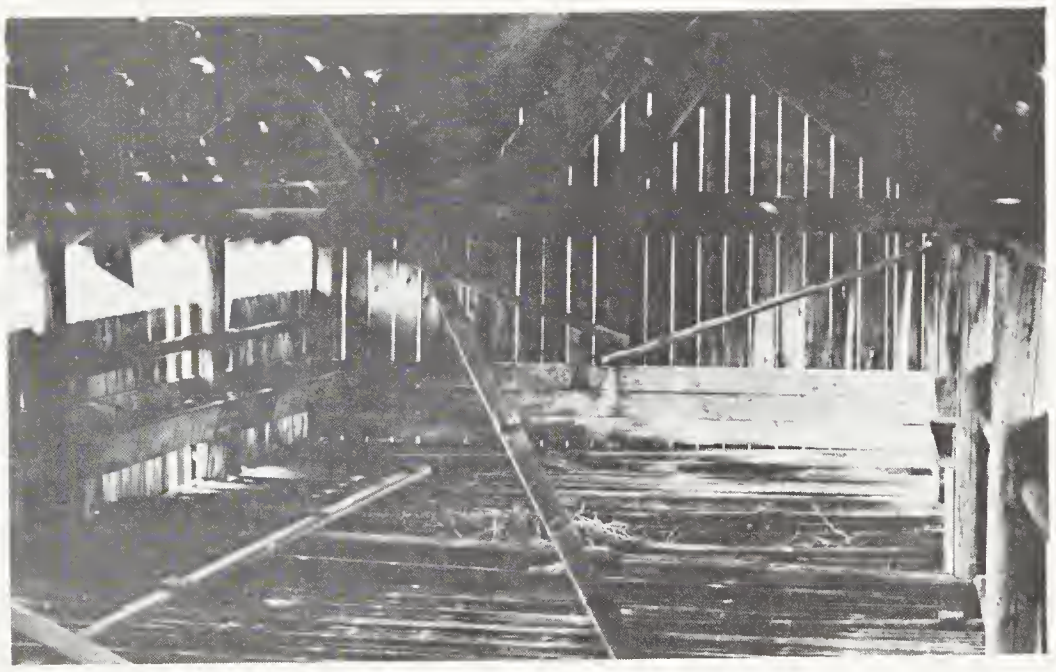


figure 21. Interior of the "buck palace" (HS-7).

figure 22. "Buck palace" (HS-7) at the Mule Ranch, looking northeast.

figure 23. HS-6 at the Mule Ranch, looking west.

figure 24. HS-4&5 at the Mule Ranch, looking southwest.

figure 25. HS-2 at the Mule Ranch, looking west.

figure 26. Sheep dipping complex (HS-9) at the Mule Ranch, looking southwest.

figure 27. Sheep shearing shed (plant) (HS-1) at the Mule Ranch, looking west.

figure 28. Turn-styles at the sheep dipping complex (HS-9) Mule Ranch.

roof with boards in the gable end. The sill logs rest on the ground and there is an earth floor inside. The large door on the north, as well as all of the other doors and windows, are missing. The north end has fallen away and the structure is in danger of collapse. There is a wood-fired boiler in the structure with mixing tanks.

Adjacent to the boiler structure is the sheep dip trough. It is constructed of concrete and has collapsed inward. At the south end of the trough is a system of gates that revolve on a central pivot to force the sheep into the trough. At the north end is a concrete foundation. These structures are all in poor condition.

To the west of the boiler structure are three sheds used to protect the sheep from the weather. They are constructed of posts and poles with board siding. One structure has a gable roof, and the other two shed roofs are covered with corrugated metal. These structures are in poor condition.

Historical Development

The Mule Ranch apparently received its name from A. W. McCune. During the mid-1880s, McCune used the ranch area as a pasturage for the mules and horses that he employed in his logging operations in the Mount Haggin Area. It is not known whether or not McCune constructed any buildings at the ranch. However, it is reported that there was a horse and mule barn situated at the northwest corner of the ranch site, probably near the present-day sheep shearing structure. Between 1902 and 1914, George Welcome and Fred Peckover owned the Mule Ranch. Some of the buildings of the ranch may date from that period.

During the 1910s, the Anaconda Copper Company's Deer Lodge Valley Farms Company grazed cattle and occasionally horses at the Mule Ranch. Hay also was grown in the area for use as winter forage. In 1917, the Anaconda Company completed a complicated land transfer by which it acquired the Mule Ranch. In the early 1920s, Dr. Henry C. Gardiner, who managed the Deer Lodge Valley Farms Company, established the Mount Haggin Land and Livestock Company. He leased the Mount Haggin Area from the Anaconda Company and began a purebred Hampshire sheep ranch. The Mule Ranch became the primary site of his

operations.

Dr. Gardiner was an innovator of sheep-raising techniques. He utilized a precise system of selection for breeding rams and ewes. Many of the structures at the Mule Ranch reflected the application of Gardiner's techniques. Corrals and sorting pens were unusually large and elaborate. The Mule Ranch had a number of these corrals, but they are no longer standing.

Historic Structure #1 was the sheep-shearing shed. Permanent overhead shears, driven by compressed air, were employed to remove the wool. The fleece was then loaded in sacks and temporarily stored in an accompanying shed. The corrals and fences surrounding the shed were used to funnel sheep into the shed. They are no longer standing.

Other structures at the Mule Ranch served obvious ranch needs. Historic Structure #2 was a horse and mule barn. Historic Structure #3 served as a house for the company's employees. It was originally located on the Barnowsky Ranch near Moose Creek. It was moved to the Mule Ranch during the late 1940s or early 1950s. Historic Structure #4 was utilized as a horse barn and corral complex. Historic Structure #5 was a bunkhouse. Historic Structure #6 is a small log cabin that, for a time, was occupied by one Napoleon Tessier. Tessier was an early immigrant to the Mount Haggin Area who spent his last days working for the Mount Haggin Land and Livestock Company at the Mule Ranch.

Historic Structure #7 was of special significance to the Mule Ranch Hampshire sheep operations. The interesting 2x4 slat flooring was designed especially for Dr. Gardiner's prize rams. The floor design provided ventilation to the pen. Rams that were kept cool by this means were considered more potent than those that could not be protected from the summer heat. The building was known as the "buck palace."

Historic Structure #8 is a small shed with an undetermined function.

Historic Structure #9 is the sheep-dipping complex. Dipping sheep in some form of insecticide after shearing is an important activity on a sheep ranch. Customarily, once shorn, sheep would be forced into a long trough or pool, which contained the liquid disinfectant. On the Mule Ranch, Dr. Gardiner devised a turn-style gate that automatically forced the sheep into

the dip.

During its more productive years, the Mount Haggin Land and Livestock Company ran as many as 8,000 pure-bred Hampshire sheep at the Mule and Home Ranches. It was certainly the largest Hampshire operation in Montana and possibly the western region. Dr. Gardiner's techniques and results won him national recognition.

The Mount Haggin company used the Mule Ranch only for a summer pasturage. The facility was abandoned during the winter months. In 1965 the Mount Haggin Livestock Company acquired the Mule and Home Ranches from the Anaconda Copper Mining Company. The site was donated to the State of Montana in 1976.

Site Significance

The Mule Ranch was one of the largest pure-bred sheep ranches in Montana. The ranch is associated with Dr. Henry Gardiner, whose long career in sheep-raising and innovative techniques make him a significant figure in the history of Montana's livestock industry. The Mule Ranch's association with the Anaconda Copper Company's "smoke case" and the subsequent attempts by Dr. Gardiner to disclaim smelter fume damage add to the ranch's historical significance.

The buildings at Mule Ranch also have architectural significance in that they are representative of the region's log construction. The log buildings at the ranch exhibit fine workmanship and attention to details. Hand-hewn logs around corners and windows on some buildings accentuate these features. Materials used in the construction of all of the buildings at the ranch are similar.

The Mule Ranch is eligible for listing on the National Register of Historic Places under criteria a, b, and c (36 CFR Part 60.6). The ranch has both state and regional significance.

B. Home Ranch (Site 24DL133)

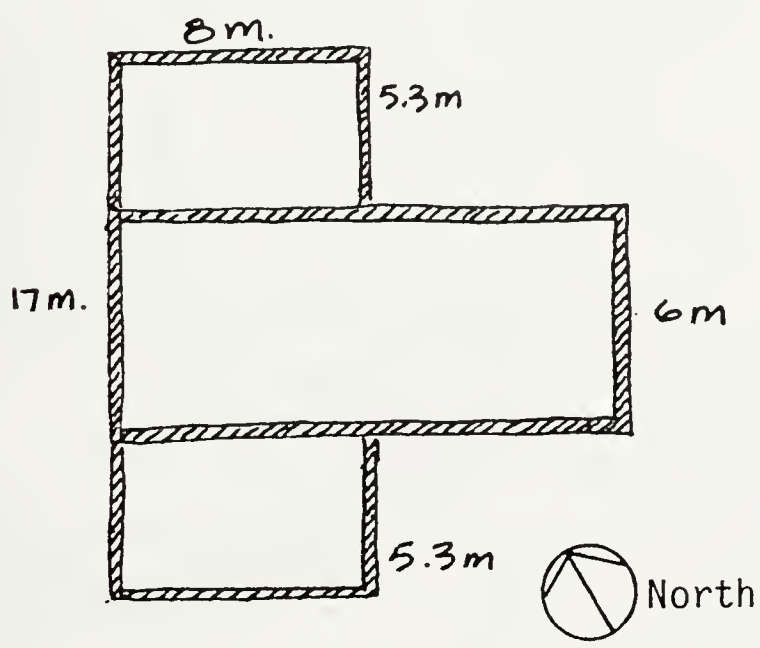
Site Description

The Home Ranch site consists of five structures that are located in the SE/4 SE/4 Sec. 4 and the NE/4 NE/4 Sec. 9, T2N R12W. The structures lie on a north-south trending terrace, on the east side of Deep Creek (see Figure 29). The site area consists of grassy meadow and marsh. There are no forested areas in the immediate vicinity of the Home Ranch site.

Architectural Descriptions

All drawings are in meter lengths.

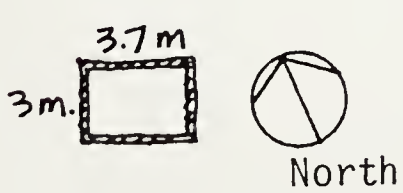
Historic Structure #1: Ranch House Foundation



This structure consists of a stone foundation where the ranch house once stood. The foundation is slowly deteriorating. There is a metal hot water boiler sitting in the center of the foundation.

The plan formed a "T" with a central entrance. There were probably rooms to the back and to each side of the entrance. Reportedly, the log structure that rested on this foundation was similar in design to the house (Historic Structure #3) at the Mule Ranch. The structure at the Home Ranch burned a few years ago.

Historic Structure #2: Wellhouse



The wellhouse structure is constructed of a 4" structural clay tile. There is no door or roof on the structure. The floor on the interior has been removed

figure 29. Site Map, Home Ranch

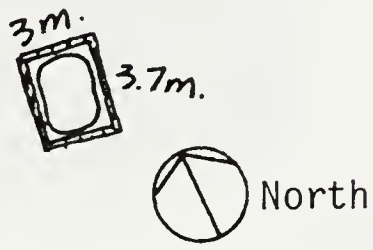
section 4 & 9, T2N, R12W

USGS 7.5 min.
Lincoln Gulch

and the wood floor joists are exposed.

This structure is in poor condition.

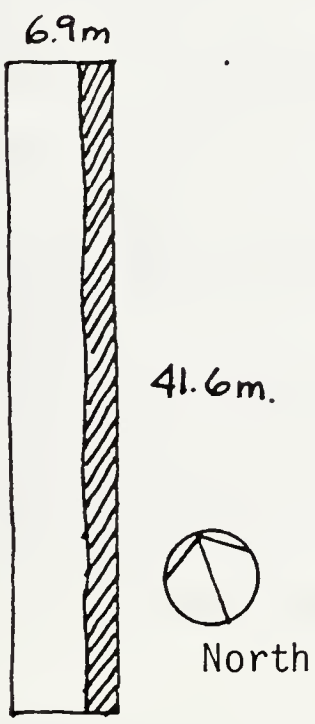
Historic Structure #3: Water Storage Building



The water storage building is constructed of structural clay tile. It sits directly above the ranch house foundation. There is no door or roof on the structure. A metal oval-shaped water storage tank fills up almost all of the interior.

This structure is in poor condition.

Historic Structure #4: Storage Shed

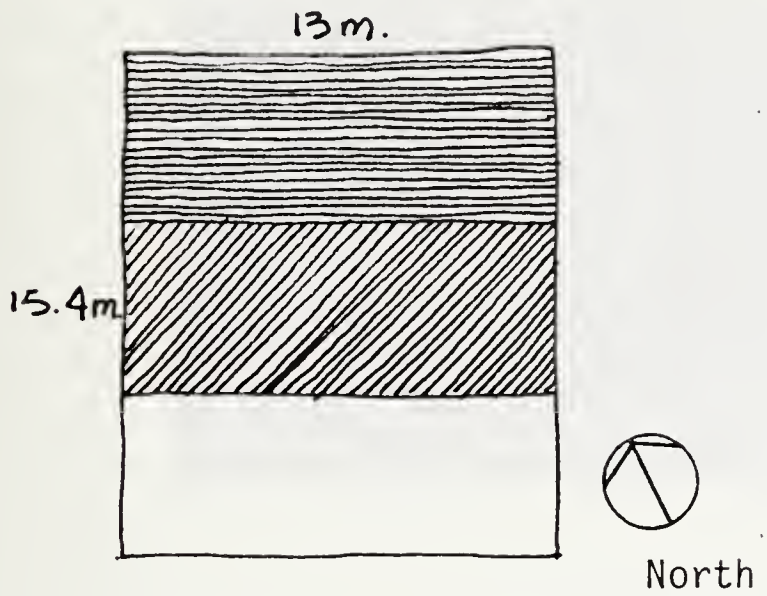


The storage shed is a post and pole structure with board and batten siding. It has a corrugated metal partial gable roof.

The structure is open on the east side and some of the siding is missing on the west side. There is a wooden floor on the interior that is deteriorating rapidly.

The building is in fair to poor condition.

Historic Structure #5: Barn



The two-story barn is constructed of 8" to 10" logs with a lap notch joint at the corners. The interior has wood chinking and the exterior has mud daubing between the logs. There is a one-story shed roofed structure attached to the north side. This structure has a post and pole frame with board and batten siding.

The main structure has a pitched gable roof with board and batten in the gable ends. Both roofs are covered with corrugated metal.

The barn has a stone foundation but large sections of the foundation are missing on the south side, causing potential structural damage. Reportedly, the structure's foundation has been vandalized.

The interior of the structure has wood floors on a log joist system. There is a series of pole and board stalls within the structure. The loft has a board and batten floor with the battens on the underside. There are pole rafters.

The doors to the structure, including the loft doors, are boards with a "Z" frame.

The structure is in fair condition. It is in danger of collapse, however, if the foundation wall is not fixed soon.

Feature #1

A corral complex that is situated approximately 1/4 mile south of the Home Ranch. The corral is of the post and pole variety and is quite elaborate. It is in good condition.

figure 30. "Jackleg" type fence, north of the Home Ranch.

figure 31. Horse barn at the Home Ranch. (HS-5)

figure 32. Corrals south of the Home Ranch.

Historical Development

The Home Ranch was originally located by one John B. Lindsay. In 1889, Lindsay purchased a 160-acre parcel of land along Deep Creek. Between 1902 and 1914, George Welcome and a partner, Fred Peckover, owned the Home Ranch. They also owned the Mule Ranch. The buildings at the Home Ranch site were probably built during the tenure of the Welcomes. In 1917, the Anaconda Copper Mining Company completed a complicated land transaction whereby it purchased both the Home and Mule Ranches. After that date, the Company leased the Home Ranch to Dr. Henry C. Gardiner. Both the Home and Mule Ranches were integral to Gardiner's operations.

The Home Ranch site was occupied year-round during the late 1910s and 1920s. The Deer Lodge Valley Farms Company maintained a foreman at the ranch during the winter. The ranch served as the headquarters for the company's Mount Haggin activities during the summer months. The company's horses were kept at the ranch.

After the formation of the Mount Haggin Land and Livestock Company during the mid-1920s and the shift from cattle to sheep, the Home Ranch was occupied only during the summer months. The ranch was still used to house the foreman and his family. The Mount Haggin Company's stock horses were kept at the ranch and hay from the ranch's meadows was cut and stored for winter feeding in the Deer Lodge Valley.

The Mount Haggin Livestock Company acquired the Home Ranch from the Anaconda Company in 1965. The property was donated to the State of Montana in 1976.

Site Significance

The Home Ranch served as the headquarters for the Mount Haggin Land and Livestock Company's pure-bred sheep ranch. It was an integral part of the Gardiner Hampshire sheep operation. Both the Home Ranch and the Mule Ranch have close historic association and may be considered a historic district.

The buildings at the Home Ranch also have architectural significance. The two-story horse barn is a good representation of log-building craftsmanship and it may be one of the finer log barns in the region. The stone

foundation exhibits excellent workmanship. In addition, the clay tile used in the construction of the water storage building and the wellhouse make those buildings significant.

The Home Ranch is eligible for listing on the National Register of Historic Places under criteria a, b, and c (36 CFR Part 60.6). The site has state and regional significance.

PART IV

MANAGEMENT OF HISTORIC RESOURCES

A. General Management Considerations

Historic resources are managed for their interpretive and educational value. They serve as an illustration of past social, economic, and political events, and often offer important information to scholars about an area's historical development. Naturally, the interpretive emphasis and level of management for specific historic resources can vary. A particular resource may illustrate a multiple of historic themes, which may be given equal or unequal weight in the interpretive plan. Similarly, a management area may contain wildlife, geologic, or other natural resources that are quantitatively and qualitatively more valuable than historic or cultural resource values. In this case, historic resources may be considered of secondary importance. Consequently, they are not interpreted as elaborately as might be possible.

The types of historic sites that are present within a given area, their location, and condition greatly influence the form of management. Sites that are spatially compact and reflect one predominant historic theme obviously lend themselves to interpretive displays. The erection of informative signs and graphics, the construction of a display of artifacts, or, perhaps even the institution of a "living history program"* might be the appropriate course of action in this case. An area that does not lend

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*A "Living History Program" attempts to interpret a historic site by recreating the atmosphere surrounding it. Individuals assume roles of people who may have lived and worked at the site. The characters are available to the public to answer questions and to demonstrate arts and crafts that reflect the history of the site.

itself to such compact interpretation may require a more general approach. Where sites are diffuse and reflect a variety of historic themes and periods, construction of a central interpretive area may be warranted. A general display of maps, text, graphics, or slides may be the preferred way to recognize the valued resources. The latter interpretive procedure may be especially necessary where the condition of historic resources would make stabilization and preservation uneconomical.

The management of historic resources does not necessarily entail interpretation. Many sites are important because of the historical data that they can offer to scholars. In such a case, it is the inherent educational and research value of the site that should be protected or recovered.

The most important consideration for an agency is that it develop a comprehensive plan for managing cultural resources within its jurisdiction. Federal and state legislation requires that cultural sites be given due consideration before activities in an area can impact them.* This requirement does not mean that all cultural resources must be preserved. Indeed, the comprehensive inventory of an area and the development of a management plan should designate the resources that may be worthy of preservation. Federal regulations provide a procedure for evaluating the relative importance of cultural resources (36 CFR Part 800). Review by the Montana State Historic Preservation Office is an integral part of this process. That office has adopted the federal guidelines for determining the significance of a given cultural property. It is this criteria (36 CFR Part 60.6) and procedure that should be addressed in the agency's management plan.

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*The Montana Antiquities Act as amended in 1979 requires State agencies to "adopt policies for the preservation of heritage properties and paleontological remains on lands owned by the state and avoid, whenever feasible, state actions or state assisted or licensed actions that substantially alter heritage properties or paleontological remains on lands owned by the state" (Montana Code Annotated 22-2-724).

B. Types of Historic Sites in the Mount Haggin Area

Known and potential historic sites in the Mount Haggin Area are associated with three principal themes: mining, lumbering, and livestock production (agriculture).* The structural remains that illustrate these themes are often similar. Obviously, the need for shelter required miners, lumbermen, and ranchers to construct some type of dwelling. As could be expected, an abundance of lodgepole pine in the Mount Haggin Area inevitably resulted in the construction of log cabins. The need to divert water from small streams, whether it be to wash gravels and sands, to float logs, or to irrigate hay meadows, required the construction of flumes, chutes, and ditches. Many of these structures are similar in design and construction.

Often, the remains of structures, trails, and other historic features cannot be assigned to only one historic theme. Undoubtedly, a cabin that was occupied during the mining era at French Gulch during the 1870s, if still standing in 1906, could have been used by lumbermen. Similarly, trails and roads that were used during protohistoric times (1700-1800) were likely used during historic times.

Despite the difficulty in exclusively assigning one particular type of historic site to a particular activity, it is possible to place sites in categories according to how they are found in association with a specific historic theme. The following list presents the kinds of structures and structural remains that may be associated with historic themes in the Mount Haggin Area.

Historic Theme	*Type of Structure/Structural Remains*
Mining	camps and communities: identified by cabins, barns, roads and trails, cemeteries (possibly showing ethnic influences, Chinese)
	isolated cabins or groups of cabins

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*It should be noted that a thorough pedestrian survey of the Mount Haggin Area might uncover historic sites that are associated with additional themes.

Historic Theme	*Type of Structure/Structural Remains*
Mining (continued)	activity areas: identified by tailings, mine adits, cabins, shed, flumes, tramways, ditches
	isolated flumes and ditches
	isolated tramways
	trails and roads
Lumbering	camps and communities: identified by cabins, barns, corrals, roads and trails
	isolated sawyers' cabins
	Forest Service administrative sites (cabins, barns, outbuildings, corrals)
	activity areas: identified by stumps, stull and cordwood piles, flumes, chutes, skidways, cables
	isolated flumes and ditches
	roads and trails (especially associated with Forest Service)
	Forest Service fire lookout stations
Livestock Production (Agriculture)	ranches: identified by cabins, barns, outbuildings, corrals, fences, irrigation ditches
	isolated cabins ("line camps")
	isolated corrals
	fencing (especially "jackleg" type)
	roads and trails

C. Areas for Historic Sites

It is difficult to limit precisely the areas likely to contain a particular type of historic site. Since the historic record of use of the Mount Haggin Area is relatively long, especially for French Gulch, any particular section of land likely witnessed successive utilization by miners, loggers and sheep/cattle ranchers. The structural remains of any historic activities may be present in any portion of the Mount Haggin Area.

With the above qualification, it is possible to suggest the sections of Mount Haggin that are most likely to contain a historic site that illustrates one of the three historical themes. Logging and mining activities were, naturally, confined to the gulches and draws in the area. Although sheep and cattle ranchers used many of these same areas for pasturage, they generally confined their ranch operations to the major drainage bottoms. By reviewing information supplied by early General Land Office survey maps and that offered by informants, the area of logging and mining activities can be further defined.

The area descriptions presented in Figures 33-36 generally represent where one is likely to find historic sites that represent the three historical themes. (See also Figure 37.)

Area 1

Concentrations of historic sites might appear in Sections 5, 6, 8, and 10, T2N R11W, and Section 1, T2N R12W. This area includes the site of the original French Gulch and reported placer diggings. It also may contain a Chinese cemetery. The area also includes the site of the second French Town, an early mining and later a logging camp. Reportedly, there are a number of cabins that may be associated with mining activities in Section 10, T2N R11W.

The French Gulch Mining District and its associated Oregon Creek Placer Diggings were given site numbers during the 1978 archaeological survey (24DL156 and 24DL175 respectively). There has been no recording of historic sites in these areas.

Area	*Map Key*	*Thematic Association*	*Geographic Location*
Area 1	Orange	Mining	Portions of Secs. 29, 30, 32, all of Sec. 31, T3N R11W
			Portions of Secs. 2, 5, 7, 14, 15, 17, all of Secs. 3, 4, 6, 8, 9, 10, 11, 16, T2N, R11W
			Portions of Secs. 1, 12, T2N R12W
			Portions of Sec. 36, T3N R12W
Area 2	Green	Lumbering	Portions of Secs. 20, 32, 29, all of Secs. 8, 9, 10, 15, 16, 17, 21, 22, 27, 28, 33, 34, T3N R11W
			Portions of Sec. 5, T2N R11W
			All of Secs. 2, 11, 14, 23, T3N R12W
Area 3	Yellow	Livestock Production (Agriculture)	Portions of Secs. 36, 27, 32, all of Secs. 12, 13, 25, 26, 35, 34, T3N R12W
			Portions of Sec. 30, all of Secs. 7, 18, 19, T3N R11W
			Portions of Secs. 1, 2, 10, 9, 8, 7, 18, 19, all of Secs. 3, 4, 5, T2N R12W

AREAS FOR HISTORIC SITES

Area 2

Concentrations of historic sites might appear in Section 5, T2N, R12W, and in Sections 15, 16, 21, 22, 27, 28, 33, 34, T3N R11W. Remnants of the W R. Allen Company sawmill, later the Mines Timber Company sawmill, may be in the NE/4 of Section 5. Remains of the Allen Company flume and a tramway, perhaps associated with both mining and lumbering, are reported in Sections 33 and 34. The Waterloo Ranger Station was situated in Section 17, T3N R11W.

It should be noted that the northeast corner of the Mount Haggin area, the headwaters of Willow and Whitepine Creeks, may contain remnants of the lumber industry (Secs. 4, 5, 6, 7, 8, 9, 14, 15, 16, 17, 18, 19, 20, 21, 22, T3N R10W; Secs. 31, T4N R10W). Although there is little documentary information available on logging activities in this area, a sawmill did operate at Gregson. Some of the timber undoubtedly came from the Mount Haggin Area.

Area 3

Historic resources are located in Section 25, T3N R12W, and Section 30, T3N R11W (24DL172), and Sections 4 and 9, T2N, R12W (24DL133) (see Part III). Additional historic sites are likely in Section 1, T2N R12W, and Sections 32 and 33, T3N R12W.

D. Impacts to Historic Resources in the Mount Haggin Area

Since 1976, impacts to historic resources in the Mount Haggin Area have occurred from two sources primarily, a logging contract and a grazing lease. The Montana Department of Fish, Wildlife and Parks inherited an earlier logging contract with the Louisiana Pacific Corporation when the agency acquired the Area in 1976. In the course of fulfilling its contract, Louisiana Pacific has impacted historic sites. In 1976, the Department also inherited a grazing lease with the Mount Haggin Livestock Company. Impacts to historic sites have occurred as a result of the actions of employees of that company and by livestock that has been grazing in the area.

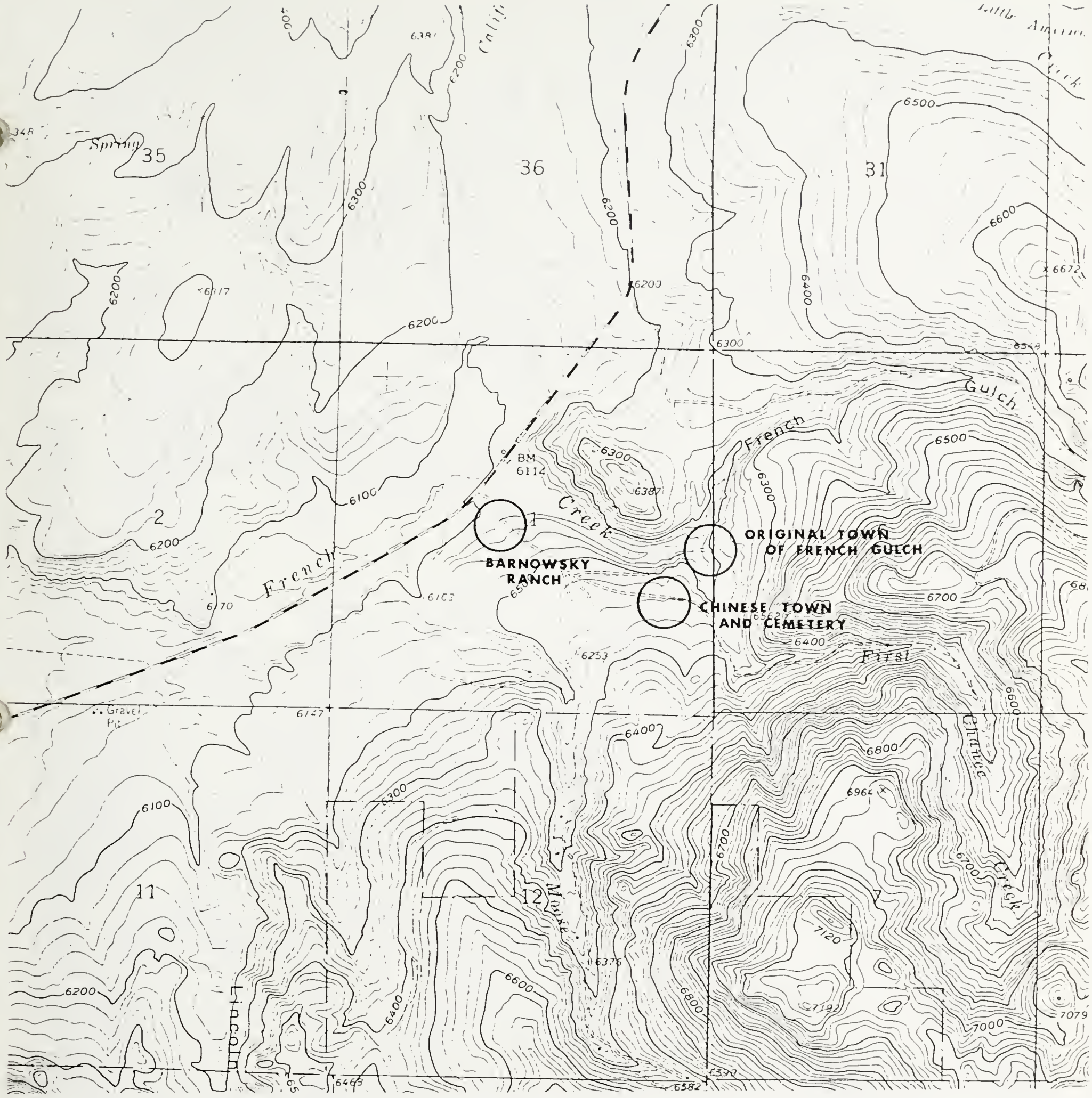


figure 33. Area 1, partial.

USGS 7.5 min.
Lincoln Gulch

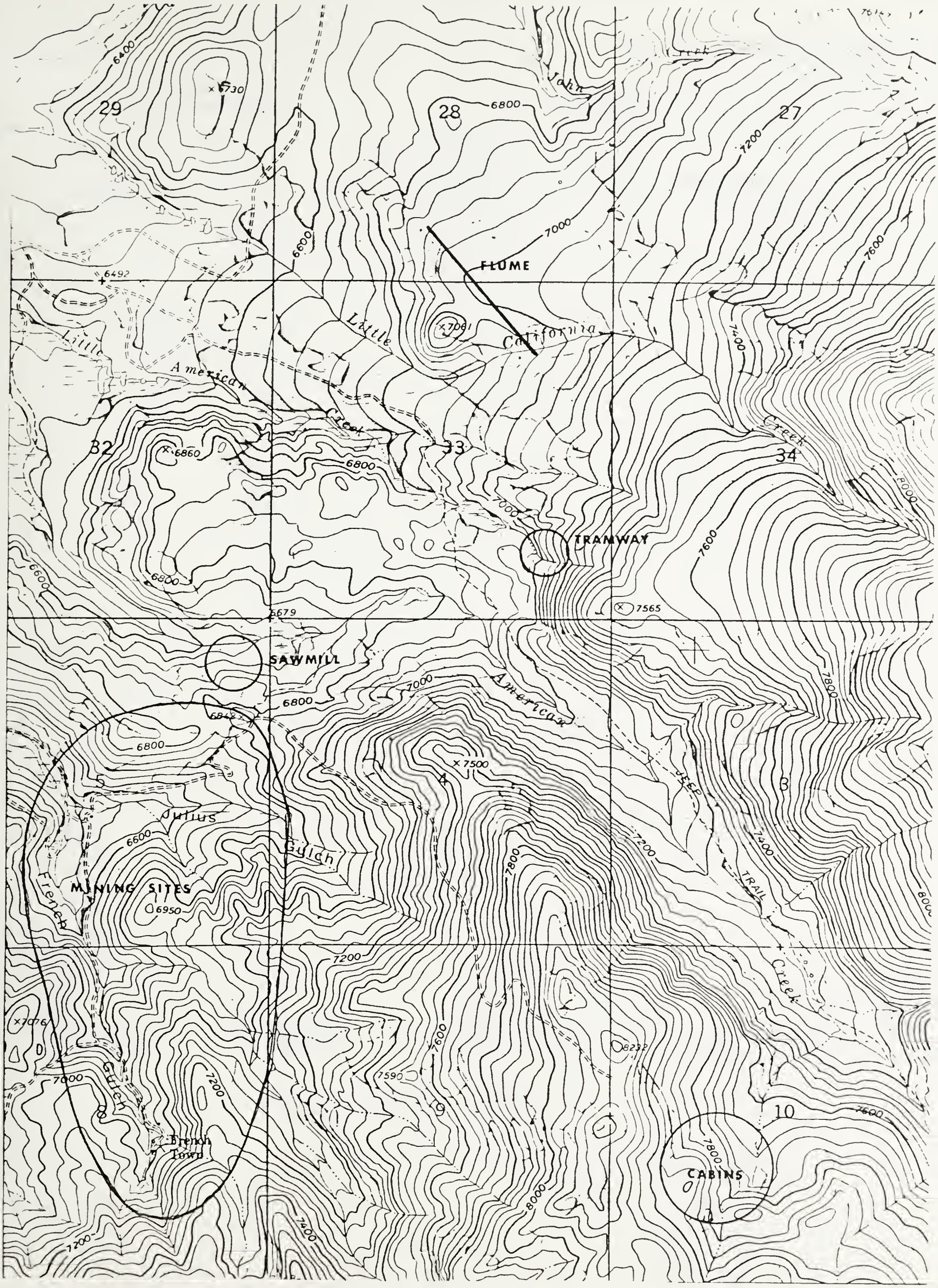


figure 34. Areas 1&2, partial.

USGS 7.5 min.
Dickie Peak

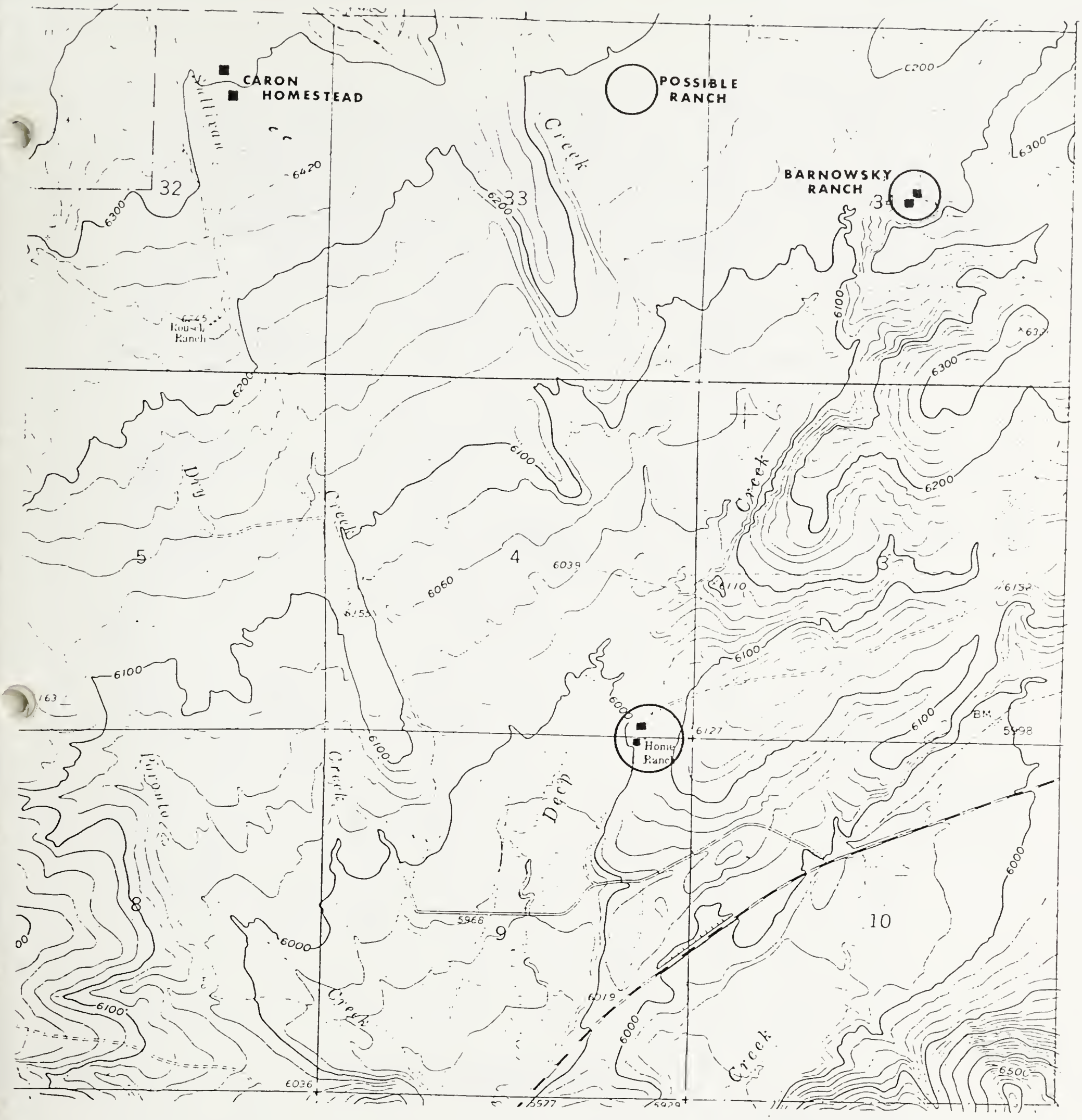


figure 35. Area 3, partial.

USGS 7.5 min.
Lincoln Gulch

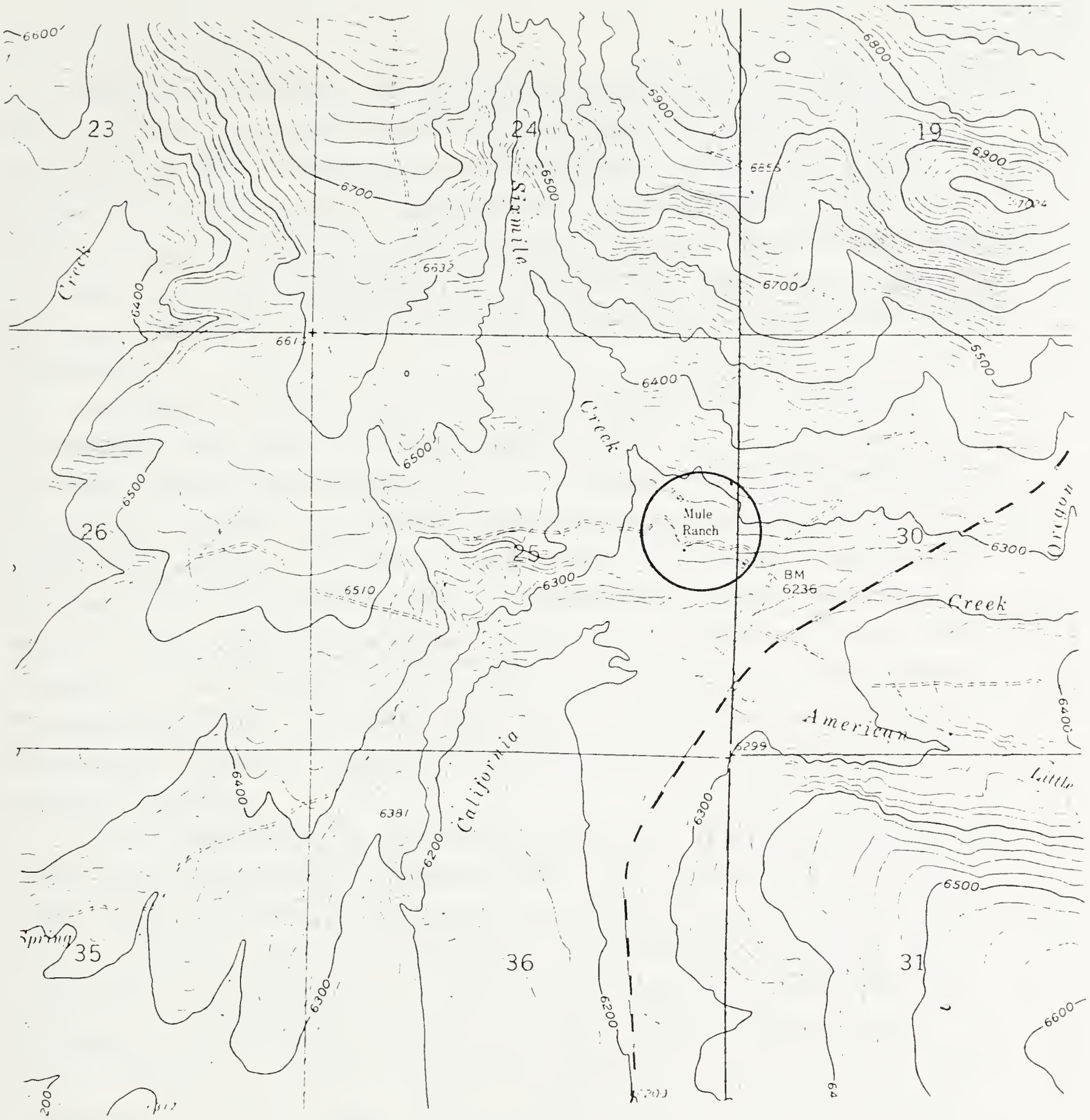
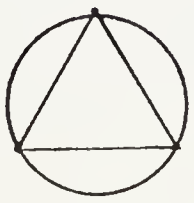


figure 36. Area 3, partial.

USGS 7.5 min.
Lincoln Gulch



Other activities that are not associated with either the logging contract or grazing lease also may have caused impact to historic resources. Department of Fish, Wildlife and Parks personnel may have inadvertently impacted sites in the course of administering the Mount Haggin Area. In addition, the more accessible historic sites in the Area may have been impacted by summer and winter recreationalists. This latter impact may be particularly noticeable near the site of the original town of French Gulch (Sec. 1, T2N R12W).

The degree of impact to historic sites is difficult to determine. Reportedly, some cabins and other historic features have been destroyed by logging contractors operating in the American Creek and California Creek drainages. In addition, numerous fences and corrals appear to have been removed by employees of the Mount Haggin Livestock Company. Vandalism by visitors to the Mount Haggin Area is undetermined to date. Some impacts have undoubtedly been minimized by the diligence of concerned Department officials and consultants who have urged road contractors to avoid cabins. Department officials also have urged their own employees and those of the Mount Haggin Company to curtail any operations that might damage possible historic resources.

This informal means of protecting potentially significant historic resources has been helpful in preventing the indiscriminate destruction of sites. The problem with this approach to managing historic resources is that it does not allow for a systematic and professional recording and evaluation of possible historic sites. It relies on the individual assessment of historic significance by a variety of untrained personnel. It is difficult to determine the level of impact to and hence the surface integrity of historic sites, since no strategy has been applied to their identification. More importantly, it is impossible, at this point in time, to quantify the number of sites that may be eligible for listing on the National Register of Historic Places, or to enumerate the number of National Register eligible sites that have been destroyed.

Without an inventory and assessment of historic sites in the Mount Haggin Area, it is likely that some form of impact will continue. Although

it is difficult to discern the detailed logging plan of the Louisiana Pacific Corporation, it is known that the company's logging contractors will eventually begin operations in the American and California Creek drainages(Sections 27,33,34, T3N R11W; Section 10, T2N R11W). All four of these sections are likely to contain historic resources.

In addition to these threatened areas, grazing-related activities in Sections 25, 32, 33, T2N R12W, Section 30, T3N R11W, and Sections 4 and 9, T2N R12W, may further impact the historic Mule and Home Ranch properties. Accessible portions of French Gulch also may be threatened with adverse impacts (Section 1, T2N R12W; Sections 5, 6, 8, T2N R11W).

It may be possible to continue the informal arrangement of directing logging contractors and others away from historic sites. However, a thorough, professional survey would have to be initiated to guarantee the protection of significant historic resources.

E. Recommendations

The Mount Haggin Area may contain some of Montana's more important historic resources. They are resources that reflect the Area's diverse history. It is a history that spans more than 100 years and encompasses the major social and economic factors that influenced the state's development. Many of the images of the state's history are mirrored in the development of this small region of Montana. Placer and quartz mining, lumbering, and livestock production were all important activities in Montana and at Mount Haggin. Historic resources in the Mount Haggin Area represent this significance.

Placer mining began in the Area at French Gulch in 1864. It was a time when most of the first placer operations were beginning in Montana Territory. The mining industry's periodic "booms" and "busts" can be viewed from the perspective of the French Gulch District during its fifty-odd years of life. French Gulch, as with many gold mining regions of Montana, underwent the transition from a raw frontier mining camp of itinerant prospectors

to an industrial community that was overseen by a single company.

Commercial lumbering in the Mount Haggin Area was another facet of the region's history that was common to other parts of Montana. The McCune timber cutting of 1883 coincided with other large-scale logging in western Montana. The devastation wrought by the McCune loggers reflected a nineteenth-century misconception of overabundance. Such unrestrained harvesting of timber as occurred at Mill Creek helped popularize a new conservative land ethic and gave impetus to the creation of federal agencies that would be charged with protecting the public domain. Administration of the French Gulch Timber Sale between 1906 and 1917 evidenced the embryonic development of the U.S. Forest Service in Montana and the West. Procedures that were tried on the French Gulch sale were later used on other timber sales in the Forest Service's Northern Region.

Livestock production and other agricultural pursuits at Mount Haggin both followed the general pattern of development in Montana and presented some singular features. The use of high mountain meadows and natural hay fields for summer pasturage was not uncommon in the state. Stock-farming, which was characteristic of western Montana and quite different from the open-range cattle industry of the Great Plains, necessitated the exploitation of available native hay. Of more importance to Montana's livestock industry, however, was the introduction of pure-bred sheep to the Mount Haggin Area. Dr. Henry C. Gardiner's Hampshire sheep ranch had at least state and perhaps regional significance.

Certain aspects of the history of the Mount Haggin Area are particularly significant. The degree to which the Area's historical development was tied to the growth of industrial Montana is important. Early in the twentieth century, the Anaconda Copper Mining Company was challenged by the specter of environmental activism. The Company responded to the air pollution controversy by acquiring property in the Mount Haggin Area. Its ability to do so, and to remove a source of complaint, may have helped retard the establishment of air quality regulation in the state. More importantly, because of its notoriety, the Mount Haggin Area served as a model of the affects of air pollution on a Montana landscape.

The historic resources of the Mount Haggin Area are valuable. Some, such as the Mule and Home Ranches, should be considered eligible for listing on the National Register of Historic Places. Undoubtedly there are other historic sites in the Area that are potentially eligible for inclusion on the Register. However, without a thorough pedestrian survey of the Area and a recording of sites, it is impossible to determine the degree to which structural remains in the Mount Haggin Area reflect the region's rich history.

The following recommendations are suggested as a means of gathering necessary data on historic resources in the Area. They are designed to answer quantitative and qualitative questions about historic sites and to address the need for a management plan to protect what may be some of Montana's significant cultural sites.

Recommendation #1: Initiate a pedestrian survey of the Mount Haggin Area

Sections of the Mount Haggin Area should be thoroughly surveyed in order to identify historic resources. The survey is necessary not only to identify possible historic resources that may be threatened, but also to comply with state law that protects "heritage properties."

The survey should be designed to locate all "reasonably locatable" historic sites. Each site that is identified should be fully recorded on appropriate survey forms. Each feature or structure of the site should be individually described and photographed, and a site map should be prepared. Controlled subsurface testing of selected historic sites may be required. Information recovered from the site survey should be placed in context with the "Mount Haggin Historic Resources Study" historical overview. Some additional research may be necessary for individual historic sites.

Areas of possible impact to historic resources should be inventoried immediately. Other areas that are likely to contain historic and other cultural resources could be surveyed at a later date, as funds become available. Figure 37 illustrates the sections that appear to be most threatened by either logging, grazing, or recreational activity (Sections 27, 30, 33, 34, T3N, R11W; Sections 5, 6, 8, 10, T2N R11W; Sections 25, 32, 33, T3N, R12W; Sections 1, 3, 4, 9, T2N R12W).

Possible historic resources in Sections 17, 21, 22, 28, 31, 32, T3N R11W; Sections 3, 4, 9, T2N R11W; Sections 11, 12, 14, 26, 34, 35, 36, T3N R12W; and Section 2, T2N R12W, are not immediately threatened. A survey of these areas could be delayed. However, if any activity is planned for these sections, they should be placed on a higher level of priority for survey.

During this later reconnaissance, the sections that are designated as "potential lumbering" sites in Figure 37 (Sections 9, 15, 17, 21, T3N R10W) should be sampled for historic resources.

The colored sections that are not included in the present "survey area" or designated "high priority survey area" should nonetheless be considered as containing possible historic resources. All of the areas that are designated in Figure 37 as having possible historic resources should be inventoried at some point in time.

An intensive survey to locate historic properties could be undertaken in conjunction with additional archaeological investigations for prehistoric sites. This approach would be best applied in the lower elevation, drainage bottoms where prehistoric sites are most likely to occur.* It should be noted that state and federal regulations and guidelines for protecting heritage properties require an intensive survey for both historic and prehistoric resources before those resources can be impacted by a state-sanctioned undertaking. Completion of a thorough and professional survey will not only meet regulatory needs, but also will provide data for the development of a "Cultural Resources Management Plan."

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*In his comments on the 1978 archaeological survey, Davis noted that "Both of the pilot and intensive surveys reveal a decrease in site acreage covered and in site density with progressive distance away from the drainage basin."

MT. HAGGIN AREA BASE MAP

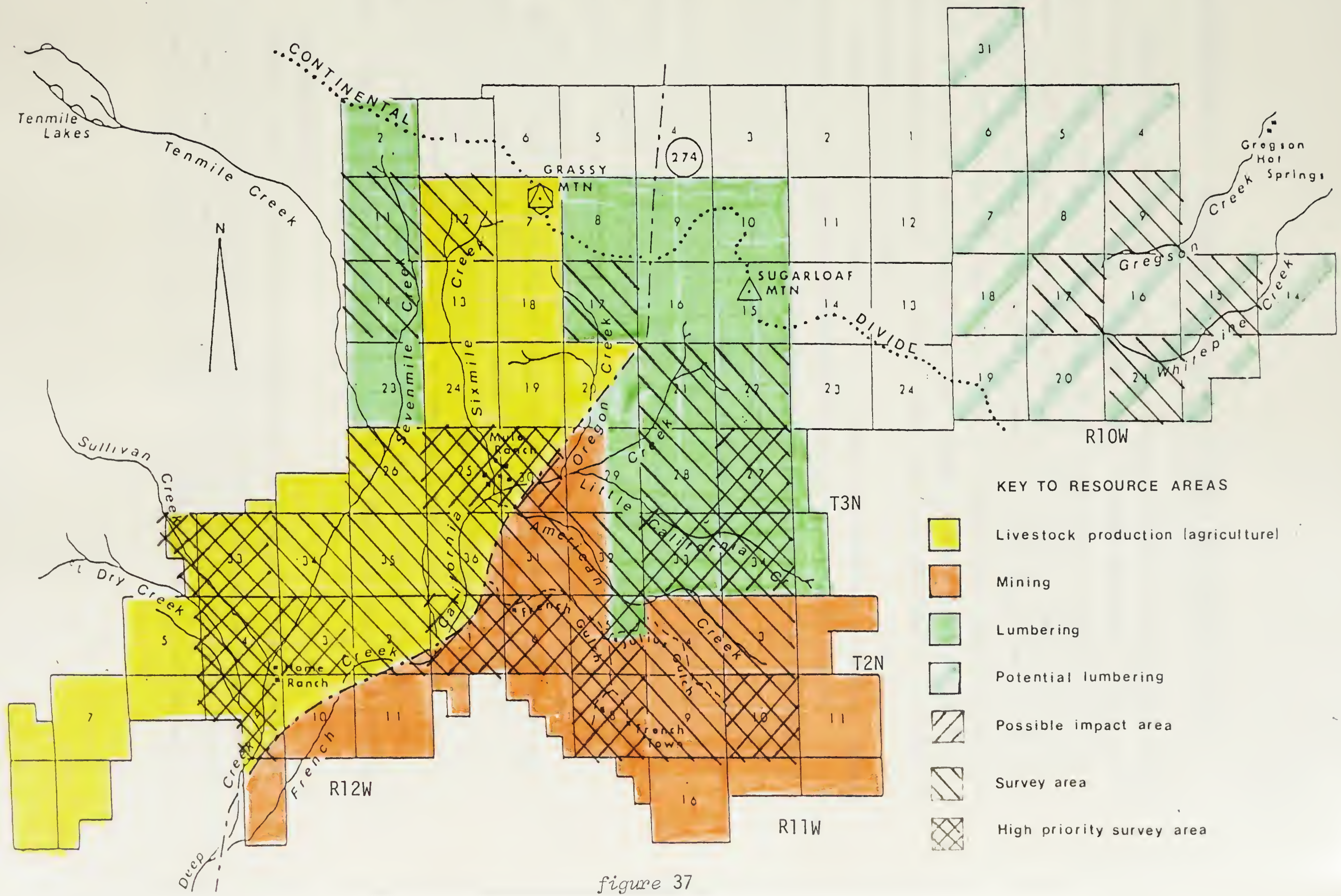
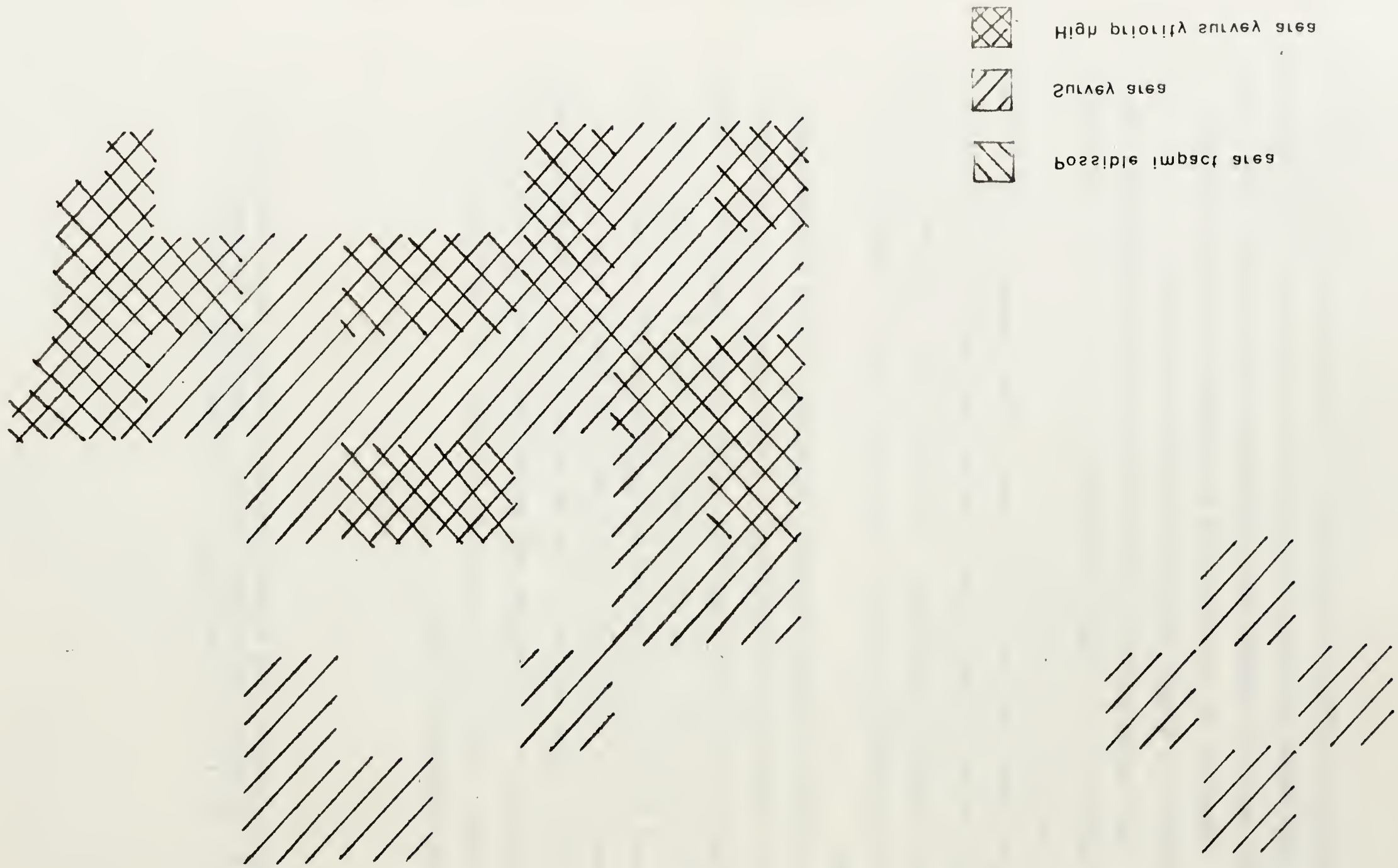


figure 37


High priority survey area
Survey area
Possible impact area

MT. HAGGIN AREA BASE MAP

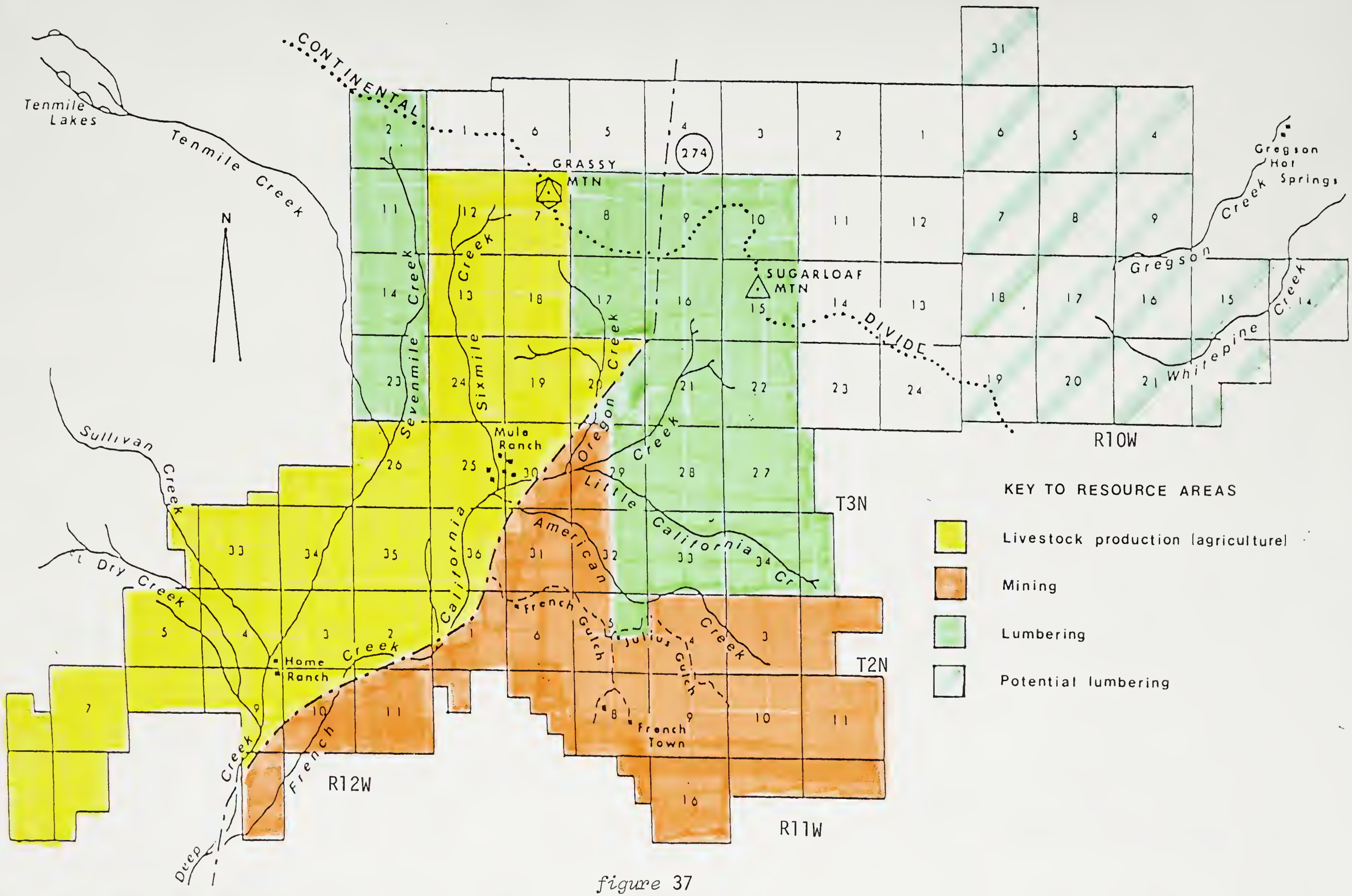


figure 37

Recommendation #2: Recognize the National Register of Historic Places eligibility of the Mule and Home Ranches

The Mule and Home Ranches are eligible for listing on the National Register of Historic Places under criteria a, b, c, 36CFR Part 60.6. Because of their distance from one another, they may be considered as separate sites. However, since they are associated with the same historic themes and use, they should be viewed as one historic property. Furthermore, any historic sites that are associated with the ranches and that may be found during the course of an intensive survey of the Area should be considered as the same National Register property. In such a case, the Mule and Home Ranches may be considered a historic district.

The Mule and Home Ranches, and any property associated with them, should be nominated for listing on the National Register of Historic Places. The Mule Ranch has been sufficiently recorded for nomination. The Home Ranch and other possible properties need further recording.

All of the structures at the Mule and Home Ranches, and those that may be in between, should be considered integral to the National Register eligibility of the property. They would include outbuildings, fences, corrals, etc. The removal of any structure or feature, prior to a determination of eligibility, could affect the property's status.

Long-range plans for the Mule and Home Ranches should be considered in the development of a "Cultural Resources Management Plan" for the Mount Haggin Area. The Mule Ranch might serve as a central interpretive area, both for Montana's sheep industry and for the other historical aspects of the Area. It also might be used as an administrative site for the Department of Fish, Wildlife and Parks personnel. Neither option excludes the other. The following alternatives for utilizing the Mule Ranch are presented.

Alternative #1

Utilize the main ranch house (Historic Structure #3) as an administrative and interpretation center. The interior of the house could be remodeled to fit both needs. However, the remodeling should attempt to be in keeping with the historic character of the ranch. The interpretation center would

focus on the entire natural and cultural history of the Mount Haggin Area. It would attempt to explain the development of the Area and its significance through photographic slide and graphic presentations.

The remaining buildings at the Mule Ranch would be stabilized. They would be used to interpret the sheep industry in Montana through a variety of means. Signs could be placed in front of the structures. Brochures could be used to promote a "walking tour." Periodically, a "living history" display of sheep-shearing techniques could be conducted. In the later instance, the Department might find support from the Montana Woolgrowers Association for the development of this site.

Estimated costs for stabilization at the Mule Ranch are as follows:

Historic Structure #1: Sheep Shearing Shed

Foundation supports	$1,500
Roof stabilization	1,200
Stabilize walls, gates, etc.	2,000
	$4,700

Historic Structure #2: Barn

Roof	$2,800
Chinking/daubing	600
Replace doors	800
	$4,200

Historic Structure #3: House

Foundation--grade site	$12,000
Chinking/daubing	600
Roof stabilization	1,000
Interior finishes	8,000
Doors/windows	1,000
	$22,600

Historic Structure #4: Horse Barn

Foundation (support)	$2,500
Stabilize walls	6,000
Chinking/daubing	1,200
Doors	400
Stalls/floor	1,700
Roof stabilization	1,800
	$13,600

Historic Structure #5: Bunkhouse

Roof	$3,500
Chinking/daubing	900
Doors/windows	1,800
	$6,200

Historic Structure #6: Cabin

Roof	$ 500
Door	100
Daubing	100
	$ 700

Historic Structure #7: Sheep Shed (Buck Palace)

Stabilize walls/ramps	$ 500
Roof	3,600
	$4,100

Historic Structure #8: Shed

Stabilize piers	$ 200

Historic Structure #9: Sheep Dipping Complex

Boiler Building	
Stabilize walls	$2,200
Roof stabilize	1,600
Frame for doors/windows	480
Sheds	
Stabilize	2,000
Corrals	
Clean-up	1,800
Sheep Digging Trough	
Stabilize walls	500
	$8,580

Sixmile Creek should be diverted from the Main House (Historic Structure #3).

Alternative #2

Utilize the main house as an administrative and interpretive site for the Mount Haggin Area, but do not interpret the other buildings at the ranch. In this case, the other ranch buildings should still be stabilized, as they are important features of the site. The main house, standing alone, would not adequately reflect the historic association of the Mule Ranch. Under this alternative, as with the first, the Mule Ranch should be protected

from livestock. The Horse Barn (Historic Structure #2), however, could be used for the Department's horses.

Under this alternative, Sixmile Creek should be restricted to its channel to avoid further erosion at the site. However, it would be possible to move the main house (Historic Structure #3) away from the stream.

Alternative #3

Utilize the main house as an administrative site, but do not interpret the historic values of the Mount Haggin Area. Either remove the other structures at the site, or allow them to deteriorate.

Alternative #4

Remove all of the structures at the Mule Ranch.

The alternative that is selected for the Mule Ranch should be reviewed by the Montana State Historic Preservation Officer. The Mule Ranch is eligible for listing on the National Register of Historic Places. State law requires that, where feasible, heritage properties be protected.

Recommendation #3: Prepare a Cultural Resource Management Plan for the Mount Haggin Area

A Cultural Resource Management Plan should be prepared for the Mount Haggin Area. The plan should follow the completion of the tasks that are outlined in Recommendations #1 and #2. The management plan should include 1) a listing of historic sites, 2) a determination of the National Register eligibility of historic sites, 3) a discussion of impacts to historic sites, 4) ways of avoiding or mitigating impact to historic sites, and 5) ways of interpreting historic sites.

Under item 5, the Department may consider the option of interpreting all historic properties at the Mule Ranch. However, it would be feasible to offer a small interpretation of French Town at that site. This would

be recommended if French Gulch proves to be a historic district, similar to the Mule and Home Ranches.

Access to historic sites in the Mount Haggin Area and the possibility of vandalism will continue to be a problem. It is not recommended that any area, other than the Mule Ranch, be developed for interpretation prior to the completion of a comprehensive Cultural Resource Management Plan.

It should be noted that the Cultural Resource Management Plan should include an assessment of prehistoric as well as historic resources. Prehistoric properties may be considered in the same or a separate plan.

NOTES

1. John Fahey, THE FLATHEAD INDIANS (Norman: University of Oklahoma Press, 1974), p. 12.

2. Alvin M. Josephy, Jr., THE NEZ PERCE AND THE OPENING OF THE NORTHWEST (New Haven: Yale University Press, 1965), pp. 29-31.

3. Fahey, THE FLATHEAD INDIANS, p. 10.

4. Elliott Coves, ed., HISTORY OF THE EXPEDITION UNDER THE COMMAND OF LEWIS AND CLARK, Vol. 2 (New York: 1893), p. 463.

5. Paul Chrisler Phillips, THE FUR TRADE, Vol. 2 (Norman: University of Oklahoma Press, 1967), pp. 263-64.

6. Ibid., pp. 394-95.

7. Merrill G. Burlingame and K. Ross Toole, A HISTORY OF MONTANA, Vol. 2 (New York: Lewis Historical Publishing Company, Inc., 1957), pp. 124-26.

8. Charles J. Lyden, "The Gold Placers of Montana," State of Montana Bureau of Mines and Geology, MEMOIR NO. 26 (Butte: 1948), p. 24. See also "Placer Mining, French Gulch, Montana," THE MINING WORLD 20 (1904), p. 24.

9. William R. Allen, THE CHEQUEMEGON (New York: The William-Frederick Press, 1949), p. 19.

10. Lyden, "The Gold Placers of Montana," p. 24; and "Placer Mining, French Gulch, Montana," p. 24.

11. This road probably followed closely the present State Highway 274.

12. Allen, THE CHEQUEMEGON, pp. 17-18.

13. The Mullan Road, built by Lieutenant John Mullan in 1860, extended from Fort Walla Walla, Washington, to Fort Benton, Montana. The Corrine Road served as the north-south connection between the Union Pacific Railroad line at Corrine, Utah, and the gold camps of Montana.

14. Allen, THE CHEQUEMEGON, p. 22.

15. Ibid., p. 23.

16. Burlingame and Toole, A HISTORY OF MONTANA, Vol. 2, pp. 183-84.

17. Allen, THE CHEQUEMEGON, p. 36.

18. Ibid., p. 36.

19. Ibid., p. 38.

20. Ibid., p. 39.

21. Mary Paddock Berthold, BIG HOLE JOURNAL: NOTES AND EXCERPTS (Detroit: Harlo Press, 1973), p. 24.

22. Rose Hum Lee, "The Growth and Decline of Chinese Communities in the Rocky Mountain Region" (unpublished Ph.D. Dissertation, University of Chicago, 1947), p. 84.

23. Burlingame and Toole, A HISTORY OF MONTANA, Vol. 1, pp. 347-38.

24. Allen, THE CHEQUEMEGON, p. 87; "Placer Book" (Deer Lodge County Assessor's Office, Anaconda, Montana), p. 20; "Lode Book" (Deer Lodge County Assessor's Office, Anaconda, Montana), p. 72.

25. "Biennial Report of the State Inspector of Mines of the State of Montana, 1909-1910" (Helena, December 1, 1910), p. 62.

26. "Placer Mining, French Gulch, Montana," pp. 24-25.

27. Ibid. See also EIGHTH REPORT OF THE BUREAU OF AGRICULTURE, LABOR AND INDUSTRY OF THE STATE OF MONTANA (Helena: 1902), p. 440.

28. EIGHTH REPORT OF THE BUREAU OF AGRICULTURE, LABOR AND INDUSTRY, p. 440.

29. "Placer Mining, French Gulch, Montana," p. 26.

30. Allen, THE CHEQUEMEGON, pp. 124-27.

31. See various REPORTS OF THE BUREAU OF AGRICULTURE, LABOR AND INDUSTRY, 1900-1904.

32. Lyden, "The Gold Placers of Montana," p. 26.

33. Charles H. Eggleston, THE CITY OF ANACONDA: ITS FIRST TWENTY-FIVE YEARS, 1883-1908 (Anaconda: N.p., 1908), p. 11.

34. Berthold, BIG HOLE JOURNAL, p. 14.

35. Letter, C. C. Hall to District Forester, December 17, 1908, Records of the U.S. Forest Service, Record Group 95, Division of Land Utilization, Purchase and Exchange Cases, Deerlodge National Forest, "Sales--Deerlodge, Mines Timber Company," National Archives (Washington, D.C.). Hereafter cited as "Sales--Deerlodge, Mines Timber Company."

36. "Establishment and Modification of National Forest Boundaries: A Chronological Record, 1891-1973," Division of Engineering, U.S. Forest Service, Department of Agriculture (October, 1973), pp. 9, 12.

37. Ibid., p. 22.

38. The Division of Forestry in the Department of Agriculture was established in 1881. The Division was a technical agency that had no administrative power over the forest reserves. In 1901, the Division of Forestry became the Bureau of Forestry and, four years later, it became the Forest Service. Under the leadership of Gifford Pinchot, the Forest Service gained administrative control of the National Forests.

39. "Map of Ranger Station Withdrawals, Deerlodge National Forest," Records of the U.S. Forest Service, RG 95, Series 126, National Archives (Washington, D.C.).

40. C. J. Pierce, R. E. Swain, and J. P. Mitchell, "Report on the Effects of Smelter Smoke on Vegetation and the Condition of the National Forests in the Vicinity of Anaconda, Montana," presented to the Department of Justice (February 5, 1913), p. 44.

41. Interview with Henry E. Gardiner, June 2, 1980, Bozeman, Montana.

42. D. T. Mason, "Utilization and Management of Lodge Pole Pine in the Rocky Mountains" (professional paper), BULLETIN OF THE U.S. DEPARTMENT OF AGRICULTURE (Washington, D.C.: July 12, 1915), pp. 13-14.

43. Ibid., p. 13.

44. Ibid., pp. 12, 13.

45. Ibid., p. 23.

46. Ibid., p. 23.

47. Ibid., pp. 23, 24.

48. Ibid., p. 26.

49. Letter, Samuel M. Cross to Chief Forester, December 4, 1908, "Sales--Deerlodge, Mines Timber Company."

50. Letter, H. S. Graves to W. T. Cox, August 31, 1910, "Sales--Deerlodge, Mines Timber Company."

51. Letter, W. R. Allen to District Forester, April 15, 1911, "Sales--Deerlodge, Mines Timber Company."

52. Ibid.

53. Letter, D. T. Mason to District Forester, April 15, 1911, "Sales--Deerlodge, Mines Timber Company."

54. Resolution, Mines Timber Company, 1916, "Sales--Deerlodge, Mines Timber Company."

55. Letter, W. B. Greely to District Forester, June 6, 1911, "Sales--Deerlodge, Mines Timber Company."

56. Deer Lodge County History Group, IN THE SHADOW OF MOUNT HAGGIN: THE STORY OF ANACONDA AND DEER LODGE COUNTY FROM 1863 TO 1976 (N.p.: 1976), p. 50.

57. Memorandum to the District Forester, September 16, 1915, "Sales--Deerlodge, Mines Timber Company."

58. History Group, IN THE SHADOW OF MOUNT HAGGIN, p. 51.

59. Letter, Assistant Forester to District Forester, January 11, 1910, "Sales--Deerlodge, Mines Timber Company."

60. Allen, THE CHEQUEMEGON, p. 88.

61. Donald MacMillan, "A History of the Struggle to Abate Air Pollution From Copper Smelters of the Far West, 1885-1933" (unpublished Ph.D. Dissertation, University of Montana, Missoula, 1973), p. 131. In 1899, Marcus Daly sold his Anaconda Copper Mining Company to the Amalgamated Copper trust The parent company was a subsidiary of Standard Oil Company. Technically, it was against the Amalgamated trust that the Bliss suit was filed in 1905.

62. Ibid., p. 110.

63. Ibid., p. 159.

64. Ibid., pp. 201, 202.

65. J. K. Haywood, "Injury to Vegetation by Smelter Fumes," U.S. Department of Agriculture, Bureau of Chemistry, BULLETIN 113 (1910), p. 40.

66. MacMillan, "The Struggle to Abate Air Pollution...," p. 202.

67. Ibid., p. 240. See also Pierce, "Report on the Effects of Smelter Smoke...," p. 45.

68. MacMillan, "The Struggle to Abate Air Pollution...," p. 368.

69. Ibid., p. 351.

70. Berthold, BIG HOLE JOURNAL, p. 29.

71. Interview with Henry E. Gardiner.

72. Ibid., and interview with Jim Drummond, June 2, 1980, Bozeman, Montana.

73. Interview with Jim Drummond.

74. Interview with Henry E. Gardiner.

75. Ibid.

76. Burlingame and Toole, A HISTORY OF MONTANA, Vol. 2, pp. 183-85.

77. The Homestead Act of 1862 allowed a person to acquire 160 acres of the public domain if he placed a residence on the land, made improvements within five years, and paid a filing fee.

78. MONTANA TRACT BOOKS, No. 199, Bureau of Land Management (Billings, Montana), p. 66.

79. Ibid., p. 64.

80. Ibid., p. 66.

81. "Present Owner Record," Book 7 (Deer Lodge County Assessor's Office, Anaconda, Montana).

82. Interview with Henry E. Gardiner.

83. "Present Owner Record," Book 7.

84. Interview with Henry E. Gardiner.

85. In 1864, the U.S. Congress passed a bill allowing the Northern Pacific Railraod Company to select public lands along its right-of-way. The grant was an inducement to the railroad to complete its transcontinental line.

86. MONTANA TRACT BOOK, No. 179, pp. 236-43, and No. 180, pp. 229-40.

87. The Forest Homestead Act of 1906 allowed the Forest Service to classify agricultural lands within a national forest as suitable for farming. These lands could then be disposed of under the Homestead Act of 1862, as amended.

88. History Group, IN THE SHADOW OF MOUNT HAGGIN, p. 24, and interview with Henry E. Gardiner.

89. Ibid.

90. MacMillan, "The Struggle to Abate Air Pollution...," pp. 148-49.

91. Ibid., p. 159.

92. Interview with Henry E. Gardiner.

93. Telephone interview with Virginia Ewing of Anaconda, Montana, June 27, 1980.

94. "Present Owner Record," Book No. 7.

95. Ibid.

96. History Group, IN THE SHADOW OF MOUNT HAGGIN, p. 24.

97. L. G. Connor, "A Brief History of the Sheep Industry in the United States," ANNUAL REPORT OF THE AMERICAN HISTORICAL ASSOCIATION FOR THE YEAR 1918, Vol. 1 (Washington, D.C.: 1921), pp. 93, 94. See also Harold E. Briggs, "The Early Development of Sheep Ranching in the Northwest," AGRICULTURAL HISTORY 2 (July, 1937), and Edward Norris Wentworth, AMERICA'S SHEEP TRAILS HISTORY--PERSONALITIES (Ames: Iowa State College Press, 1948).

98. Connor, "A Brief History of the Sheep Industry," p. 94.

99. Ibid., p. 101

100. Ibid., p. 136.

101. Briggs, "The Early Development of Sheep Ranching...," p. 161.

102. Wentworth, AMERICA'S SHEEP TRAILS, pp. 294-95.

103. John F. Bishop, "Beginning of the Montana Sheep Industry," MONTANA MAGAZINE OF HISTORY 1 (April, 1951), pp. 5-8.

104. Wentworth, AMERICA'S SHEEP TRAILS, p. 296.

105. Lee Rostad, "Charley Bair: King of Western Sheepmen," MONTANA MAGAZINE OF WESTERN HISTORY (Autumn 1970), p. 51.

106. ANACONDA STANDARD, February 19, 1928 (Anaconda, Montana).

107. Burlingame and Toole, A HISTORY OF MONTANA, Vol. 1, p. 319.

108. Ibid., Vol. 3, p. 1.

109. "Geist!" THE NEW BREEDER'S GAZETTE (July, 1929), p. 10, and interview with Henry E. Gardiner.

110. "Geist!" p. 28.

111. Ibid.

112. Interview with Jim Drummond.

113. Ibid., and interview with Henry E. Gardiner.

114. "Geist!" p. 10.

115. Burlingame and Toole, A HISTORY OF MONTANA, Vol. 1, p. 320.

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